CLEAN WATER ACT AMENDMENTS OF 1982

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

S. 777

A BILL TO AMEND THE FEDERAL WATER POLLUTION CONTROL ACT TO RESTRICT THE JURISDICTION OF THE UNITED STATES OVER THE DISCHARGE OF DREDGED OR FILL MATERIAL TO THOSE DISCHARGES WHICH ARE INTO NAVIGABLE WATERS, AND FOR OTHER PURPOSES

S. 2652

A BILL TO REVISE AND EXTEND CERTAIN PROVISIONS OF THE FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED, FOR FIVE YEARS, AND FOR OTHER PURPOSES

JULY 21, 22, 28, AND 29, 1982

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CLEAN WATER ACT AMENDMENTS OF 1982

WEDNESDAY, JULY 21, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, D.C.

The subcommittee met, at 10:07 a.m., in room 4200, Dirksen Senate Office Building, Hon. John H. Chafee (chairman) presiding.

Present: Senators Chafee, Gorton, Randolph, and Mitchell.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good morning.

This morning we are pleased to welcome to the subcommittee Dr. John Hernandez, the Deputy Administrator of the EPA, as we begin 4 days of hearings on amendments to the Clean Water Act.

These hearings were actually begun on February 5, when we heard from Dr. Hernandez on the issues that the agency was focusing on in its amendments. It was my contention at the time, and I have mentioned it several times, that the Clean Water Act is not in need of major changes. It is fundamentally sound. Nothing I have seen or heard since February has changed my opinion. Any changes in the act would slow down the job that none of us wants to occur.

When I first became a member of the subcommittee in 1977, a major item of consideration was the so-called midcourse correction in the Clean Water Act. Changes were made at that time to make the act work smoother and also to focus our future attention on controlling toxic pollutants. A midcourse correction, in other words, was made at that time. In my judgment there is no need to make another.

In preparing its proposals, one of the items that the EPA carefully reviewed for inclusion was a BAT waiver. This is also now somewhat euphemistically referred to as an environmental modification. A great deal of space in the testimony that Dr. Hernandez has submitted today is devoted to explaining the concept of the BAT waiver. Two types of waivers, predictive and nonpredictive, are discussed.

But whatever they are, it seems to me that a BAT waiver turns the Clean Water Act into an aquatic guessing game. To acknowledge that a waiver is an acceptable regulatory tool is to take a major step backward in the goals of the act. A water quality-based approach to pollution control failed before 1972 and will fail again.

Now although that concept is not included in the legislation before us today, it is clear from the testimony submitted that EPA intends to pursue and perhaps to suggest a BAT waiver sometime in the future. At a time when the agency's resources are diminishing, I expect that EPA would try to marshal these resources to get on with the job at hand rather than resurrect a policy that Congress judged to be a failure a decade ago. If a BAT waiver is suggested, I hope there is new information to support it.

Additionally, I have concerns about EPA's dependence on the notion of designated use achievement and also on the wide discretion sought in the pretreatment program. However, we will wait until the conclusion of Dr. Hernandez's testimony before pursuing these issues.

It seems to me that, given the concerns in Dr. Hernandez's testimony today, EPA is sending an important and positive signal to all of those concerned with stability in our environmental laws. For example, a recommendation for a 5-year reauthorization is a positive sign all of us want to get on with the job of continuing the cleanup of our Nation's waters.

Over the next 4 days, the subcommittee will be discussing some very complex issues—for example, BAT and pretreatment. We are fortunate to have Dr. Hernandez to work with us as we move through this process. Dr. Hernandez was an inestimable help in the construction grants bill. He was truly indispensable then, and we look forward to working closely with you, doctor, as we move these amendments through Congress.

It is my hope that we can get legislation well on its way to enactment prior to our recess for Labor Day, the end of August.

With that in mind, we welcome you, Dr. Hernandez, as you proceed. Before you start, I wonder if you could identify those with you at the table.

STATEMENT OF JOHN HERNANDEZ, DEPUTY ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY FREDERIC EIDSNESS, ASSISTANT ADMINISTRATOR FOR WATER, EPA; DOUG FARBROTHER, PRINCIPAL DIRECTOR FOR DEPUTY ASSISTANT SECRETARY OF FACILITIES, ENVIRONMENT AND ECONOMIC ADJUSTMENT, DEPARTMENT OF DEFENSE; CAROL DINKINS, ASSISTANT ATTORNEY GENERAL, LAND AND NATURAL RESOURCES DIVISION, DEPARTMENT OF JUSTICE; EPHRAIM KING, ATTORNEY/ADVISER, OFFICE OF LEGISLATION, EPA; AND PETER PEREZ, ASSISTANT FOR POLICY TO THE ASSISTANT ADMINISTRATOR FOR WATER, EPA

Dr. HERNANDEZ. Yes; good morning, Mr. Chairman, I would be pleased to do that.

On my left is Carol Dinkins, Assistant Attorney General in the Land and Natural Resources Division, Department of Justice. On my right I have Frederic Eidsness, the Assistant Administrator for Water at EPA, and Doug Farbrother of the Department of Defense.

I would also like at this time to introduce two people from the EPA staff who were principally responsible for writing these amendments and doing much of the hard work. I know it is a little atypical to do that kind of thing, but this is the kind of professional

staff that is there. I have Ephraim King from our Legislative Office. Ephraim, stand up.

Senator CHAFEE. Take a bow, Ephraim.

Dr. HERNANDEZ. And Peter Perez from the water program. And these two people know all the details.

I will proceed then with my testimony.

It is a pleasure to be here this morning, Mr. Chairman, to discuss the administration's legislative proposals for reauthorization of the Clean Water Act.

Last year at this time, I had the privilege of working closely with this subcommittee in developing major reforms to the construction grants program, as you have noted. More recently, I have had the opportunity to meet with members of the subcommittee and its highly professional staff to discuss reauthorization in general, and to explore the different perspectives that I feel certain will be brought to bear on this process. From working with you, Mr. Chairman, and the other members of this subcommittee, I have developed the highest regard and personal respect for the experience, expertise and commitment that you and your staff bring to consideration of the Clean Water Act.

Over the past decade, the requirements of the Clean Water Act have been tested and refined, challenged, and improved, analyzed and yet again revised. The purpose of this process has been to develop the most effective approach to water pollution control possible. The amendments of the last 10 years have illustrated clearly that the Clean Water Act as we know it today is neither a static piece of legislation nor a "one-time perfect fix." Rather, these ongoing developments and modifications reflect continuous efforts to address problems as they arise, discard impractical and unworkable approaches, and adopt new strategies where old ones have proven ineffective and unnecessary. Today, in considering reauthorization of the Clean Water Act, we have the opportunity to continue this process, and to improve and build upon what has already been accomplished.

In developing the specific proposals that are part of our legislative recommendation, we met with a wide range of individuals and groups over the past year. These meetings included representatives of State and local governments, public interest and environmental groups, Members of Congress, and representatives of industry. We went to these meetings to listen, and we learned a great deal. There is a broad consensus that the act is fundamentally sound, that substantial improvements in water pollution control have occurred, and that this progress must and will continue. But there is also recognition that we are faced with some urgent problems that demand our attention. The objective of our proposals is to continue the many positive aspects of the Clean Water Act that clearly have worked in the past, while at the same time address those widely recognized areas where problems have arisen.

This morning I would like to leave as much time as possible for questions and discussion. With your permission, Mr. Chairman, I will briefly summarize our recommendations and submit a longer, more technical statement for the record.

Senator CHAFEE. Yes, doctor, we will put that in the record.

Dr. HERNANDEZ. The administration's proposals are premised on a commitment to the act's fundamental objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. Our recommendations are intended to support this objective by improving the act's operation and its implementation, not changing its direction. We do not question the basic construction of the act. EPA believes that the dual approach of the general application of technology-based treatment requirements and site-specific water quality based effluent limitations has resulted in substantial progress, and that progress must continue. A major part of the progress is due directly to the working partnership between the Federal, State and local governments in addressing water pollution problems. This partnership must continue and be strengthened as well.

I believe that one of the most important features of the administration's legislative recommendations is the provision for a 5-year reauthorization. This will send a strong signal to both the public and industry alike that this Congress and this administration are committed to sustained environmental progress. This will also provide needed certainty and stability for the regulated community. Admittedly, the reauthorization period applies only to the funding sections of the act and the substantive provisions of the law can be reviewed and modified by the Congress as the need arises. Nevertheless, I strongly recommend that we join in a long-range commitment to the funding and schedules we are recommending.

Beyond a 5-year reauthorization request, our proposed modifications embody four themes. The first such theme centers on the need for more time to implement effectively certain portions of the law. These include extension of unrealistic promulgation deadlines faced by the Agency, modification of industrial compliance deadlines to conform with promulgation of BAT and BCT effluent guidelines, and expansion of the period in which publicly owned treatment works may apply for additional time extensions. We believe that all of our proposed changes reflect reality—facts and circumstances that simply cannot be overlooked.

Increased administrative efficiency is the goal of other proposed modifications. Many industries and municipal discharges have met their discharge limits and maintain an excellent compliance record. Considering this and the tremendous permit reissuance workload at the Federal and State level, we believe it makes sense to provide dischargers with permits of up to 10 years rather than the existing 5-year period. To provide for a stronger and more efficient enforcement program EPA is also asking that the administrative civil penalty and criminal sanction provisions of the Clean Water Act be strengthened.

Greater emphasis on the role of States and local governments is the third theme of our amendments. An effective working partnership with State and local governments is essential to the successful implementation of the Clean Water Act. These amendments allow the States which have not yet assumed authority for an entire permit program to administer portions of it while moving toward future assumption of the entire responsibility when this is possible. In addition, greater State and local responsibility for the pretreatment program is provided. This latter proposal is based on the

proven ability of many State and local agencies to handle their water pollution problems and recognizes the principle that those closest to the problem understand it better and can best contribute to its solution.

A final theme reflected in these proposed amendments is the need for clarification in the present statute. These proposals relate to the regulation of dams, munitions, and Federal facilities. We believe that recent judicial decisions on the regulation of dams need to be corrected. In addition, expansion of Federal facility exemptions is requested.

One issue that has been widely discussed and yet is not addressed in these proposals is the concept of exemptions from BAT technology-based controls. As I testified in February, EPA strongly supports the need to identify an appropriate method to avoid "treatment for treatment's sake." The Agency did not recommend a BAT waiver at this time for several reasons. Chief among them is EPA's agreement with this committee's position that the act is fundamentally sound and that modifications should not be made unless compelling evidence exists that the current program is not working and that there is substantial agreement on a modified approach. With most of the BAT guidelines not yet in place, it is difficult to determine the extent and type of waiver that eventually may be recommended. Nor is there agreement on how a BAT waiver program should be constructed until additional guidelines are in place. It is for these reasons that a BAT waiver program was not put forth by the administration.

The administration's legislative recommendations represent a solid, constructive approach to reauthorization of the Clean Water Act. Our proposed changes reflect many months of careful and thoughtful analysis. They are based on a detailed and comprehensive evaluation of the effectiveness of our national strategy for water pollution control. I strongly believe that, if enacted, they will strengthen not only the Agency's ability, but also that of the States and local governments to address more effectively our Nation's water pollution problems.

In conclusion, let me say that we welcome debate on our recommendations and pledge to work with and assist you in any way possible in making the Clean Water Act even better than it presently is.

This concludes my statement, Mr. Chairman, and we are pleased to be here for questions.

Senator CHAFEE. Thank you very much, Dr. Hernandez.

We note that Senator Mitchell and Senator Gorton have arrived since we started. Senator Mitchell, do you have an opening statement you would like to give?

OPENING STATEMENT OF HON. GEORGE J. MITCHELL, U.S. SENATOR FROM THE STATE OF MAINE

Senator MITCHELL. I do, Mr. Chairman, and I thank you. My statement is brief, so I will accept your invitation to make it.

I am pleased, Mr. Chairman, that you have scheduled these hearings to review the Clean Water Act.

The 1972 Clean Water Act set ambitious goals for this country "to restore and maintain the chemical, physical and biological integrity of the Nation's waters." We have in fact made substantial progress in achieving these goals in the past decade. It is therefore appropriate to review that progress and to assess after that decade of experience the workability of the Clean Water Act.

The quality of Maine's waters is testimony this law has worked. Seventy-two percent of Maine's 2,349 miles of major streams meet the goal of the law that water be fishable and swimmable by 1983. Nearly 88 percent of those major streams will meet or exceed that criterion by 1983.

Once extinct salmon have returned to the Penobscot River which had been polluted so badly that its total waste level equaled the combined sewage of Maine, New Hampshire, Vermont, and Rhode Island. These improvements are more than cosmetic, they are critically important to the economy of the State of Maine, which depends heavily on the tourist and fishing industries. And Maine is not alone in that respect.

So I approach these hearings with the conviction we ought to continue the course we set as a Nation in 1972. If there are minor adjustments required, the Congress should consider it. However, I do not believe that any major changes to this law are necessary or desirable.

In my view, those who seek to change the law carry the heavy burden of proving that the changes are necessary and that they will not defer or hinder or obstruct achievement of the fundamental goals of this landmark law.

I thank you, Mr. Chairman. I thank Dr. Hernandez and look foward to further testimony.

Senator CHAFEE. Thank you, Senator Mitchell. You have been very faithful and supportive of the efforts of this subcommittee in connection with not only the Clean Water Act but all the other pieces of legislation we have considered. We are grateful for that fine statement.

Senator Gorton?

Senator GORTON. Mr. Chairman, I don't have a formal opening statement. I am glad we have begun this process. I am glad we have heard such an affirmative and balanced presentation from Dr. Hernandez. I agree entirely with Senator Mitchell that we do not need any drastic overhaul. We do need to examine the way in which the act has worked and been implemented and to strengthen it where necessary and make technical corrections where they are appropriate.

Senator CHAFEE. Thank you, Senator Gorton. Again, likewise, you have been a very positive and helpful member of this subcommittee and attentive to the various matters we have considered, and I count on your usual fine support as we move through this Clean Water Act.

Dr. Hernandez, let's get a little into the BAT waiver and where we stand there. Could you describe for the committee what the NRDC consent decree was?

Dr. HERNANDEZ. As best I can.

The original act required EPA to set guidelines for best available technology for toxic materials. EPA did not by 1975, and a suit was

entered against the Agency approximately at that time. This was settled in court in a consent decree, and I think the date was around 1976. Those 1976 consent decree provisions were incorporated into the 1977 amendments.

As you know, the basic part of it required that EPA adopt water quality criteria for 65 toxic pollutants and that we set effluent limitations to control those materials. The effluent limitations for those 65 pollutants were to apply to the 34 industries which were listed in the committee report. This was essentially what the NRDC consent decree did, although there were other parts of it that had a number of obligations they requested us to do. We have gone down the line on that, falling behind schedule progressively.

Under the 1977 amendments, we were to have had those BAT rules in place by July 1, 1980. We were not able to accomplish that. We are now under a court decree to finish those up. All of the rules that have been proposed should become final in the next 180 days, and all that we have not proposed will be within the 180 days and become final 180 days after that. So roughly in this next year in the consent decree we are required to come up with essentially all BAT guidelines for all of the 34 industries, or a large part of them.

Senator CHAFEE. It is my understanding, in other words, by July 1983 for the 34 industries you have got to have the BAT guidelines complete.

Dr. HERNANDEZ. I think it may be a smaller list than the 34, but approximately. I think it's 24 plus 10 we have.

Senator CHAFEE. And three industries you have completed?

Dr. HERNANDEZ. That is right, sir.

Senator CHAFEE. Do you think you will be able to meet that deadline?

Dr. HERNANDEZ. Yes, sir. We have put additional resources in for that purpose. It will be very difficult. Everything will have to work well. We will have to truncate review periods within the Agency. It certainly will be one of those great trials and a great effort on our part, but we have told the court that we will do it and we will make every effort to do that. I think as we go along and find problems we will go back to the court, but it is certainly our intention right now to make every effort to do that.

Senator CHAFEE. You have asked for an extension of the compliance deadline until 1988. Give us your rationale on that.

Dr. HERNANDEZ. Yes, sir. It is clear that industry cannot meet BAT rules that we haven't promulgated yet, and the date industry must do this by July 1, 1984. If we don't get the last of the guidelines out for a year from now, it is clear that industry can't meet them by that period of time. So it is clear we must extend the dates.

Senator CHAFEE. I want to make it clear to industry, as we have in private meetings, that this is recognized. We recognized, as a committee, there is no way they can meet these compliance deadlines, and an extension has to be granted. The question is how long—1987? 1988? When should that be?

Dr. HERNANDEZ. In our amendments we selected July 1, 1988, to parallel the date set by the Congress this last year for the date by which municipalities must achieve secondary achievements, and

that date was July 1, 1988. Using that as a rationale, it would be evenhanded of us to suggest the same date. I think if you said when could industry comply we might get out the last of these guidelines let's say, sometime in 1984, then industry could be in compliance 3 years or 42 months afterward—that does take you into late 1987 or 1988. That is our rationale.

Mr. EIDSNESS. Senator Chafee, if I could make a point of clarification. In the written testimony on page 33 there is a table that has the dates we have submitted to the court that basically parallel what Dr. Hernandez has just summarized for you. I would like to emphasize two things.

One that is these dates are based upon a scenario of rulemaking that assumes everything will go right. In all candor, the chance exists that something may go wrong and that some of these dates may slip. But we are committed to meet these dates to the extent we possibly can, and we have taken a number of initiatives to increase resources in this area to be sure we have adequate resources for that purpose.

The second point I would like to make is that it is not our intent to put industry on a compliance schedule that will get them into an 1988 compliance mode. Our intent is to write permits based upon the promulgated best available technology guidelines when they are promulgated. So if an industry such as the steel industry, which we have just recently promulgated final rules on, their permits are now being written and they will have to be in compliance 2 to 3 years from the dates the permits are issued. So we will in fact be achieving best available technology as close to the time as the rules are promulgated as is physically possible for industries to construct the needed facilities and control technologies.

Senator CHAFEE. Am I correct in believing you have told the court that the compliance will be 3 years after the issuance of the regulations?

Mr. EIDSNESS. I think it will vary according to the complexity of the industrial facility. In some cases it could be as soon as 2 years, in other cases it would be 3 years.

Senator CHAFEE. My question is if you are going to have your regulations all out by July 1, 1983, and you add 3 years to that, that gets you to 1986, and yet you are asking for 1988 as the deadline. Why?

Dr. HERNANDEZ. Well, when we started that process, we still were in the courts discussing with them and pleading we should be given a longer period of time than this 360-day period that we have ended up with. And as Mr. Eidsness has indicated, we are uneasy about doing that. If it is possible, we will be there. But when initially we had asked for a 1984 date for finalizing the last of the BAT rules, if you are looking at something like 1 year to incorporate the BAT standards into permits and allow 36 to 42 months for the most difficult industry to comply with the standards then you are in that 1988 timeframe, 1987-88 timeframe.

Senator CHAFEE. You submitted suggestions. Whether that is right or wrong we don't know. But it does seem to me we all want to get on with the job. People don't get things done unless there are deadlines. If you take 3 years plus 1983, that gets you up to 1986. You are queasy about having your regulations out by then.

Allow for a year's slippage and that gets you up to 1987. And my question is suppose this committee changed your compliance date from 1988 to 1987, what would be your reaction?

Dr. HERNANDEZ. I think there is some rationale for doing that. Another approach would be to use the date these become final, and then allow a certain number of months for compliance. The period people have talked about is 36 or 42 months as being the kind of thing that is in the realm of what is needed and perhaps appropriate.

Senator CHAFEE. My time is up. Senator Mitchell?

Mr. EIDSNESS. Excuse me, Senator, I think this is worthy of clarification. I was just reviewing the timetable that describes the schedule we have submitted to the court. Noting on page 33, table 4, of the written testimony, it shows for four industry categories—inorganic chemicals [phase II], nonferrous metals [phase II], nonferrous metal forming, and plastics molding and forming—a completion date of 6/84 for final promulgation.

One thing we should all, I hope, agree on when EPA truncates its internal development process to meet tight schedules such as these, we should be certain we are at the same time promulgating rules which are legally, technically, and economically defensible. So that is one reason why some of these dates we have in here suggest a later than a 1-year completion date from now for these other industries. So when you add the 3 years to 1984 you are getting close to 1988.

Senator CHAFEE. Thank you, Mr. Eidsness.

Senator Mitchell?

Senator MITCHELL. Thank you, Mr. Chairman.

Dr. Hernandez, you have stated very emphatically EPA's commitment to the fundamental objectives of the act, and you quoted that, as I did "to restore and maintain the chemical, physical and biological integrity of the Nation's water." In the act, the very first sentence following that reads, "It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985." Does the EPA share a continued commitment to that goal?

Dr. HERNANDEZ. On January 18 of this past year the Administrator wrote a letter to all Members of Congress and Governors of all the States indicating the issues that we thought might arise in the reauthorization of the Clean Water Act. One of the issues that she discussed in her letter was the goals of the Act, and specifically the two goals, the fishable/swimmable goal and the so-called zero discharge goal that you have quoted. As to whether this goal should be a binding one, I think the answer is no, because what you have is the problem of us being able to measure more and more carefully every year to find out that things are present in such trace quantities that if you take zero in some kind of an absolute and scientific sense we will never get to zero on any kind of discharge. If we said we won't have any kinds of discharges into water bodies at all and we will dispose of all this material, you end up with the paradox of having to dispose on the land or into the air. There is no way to do this in our life. We are stuck with all the wastes we generate. Some of them we can use. However, many of them are not reusable or recyclable and they end up becoming part of our discharges that go into our air, into our streams and oceans.

To limit those is certainly a goal. To control these discharges so that we have fishable/swimmable streams is a goal that we would support. But zero discharge is not scientifically attainable in an absolute sense.

I hate to go on so long on this, but let me just pursue this 1 more minute with you.

Senator MITCHELL. Please take your time. It is an important subject and I think you should take as much time as you want.

Dr. HERNANDEZ. I guess I count myself as an old timer in this business. When we started talking about what is achievable in terms of water pollution back in the 1950's and 1960's we talked about removing suspended solids, about removing biochemical oxygen demand in water, about removing things that cause turbidity which hinders high quality fish life in streams. We said by and large we can remove all these things, these are treatable. We can get to zero on these organics that exercise an oxygen demand, but many of the other organics remain in place. Many of these affect biological life and they are in trace quantities. Today we can measure those things and identify them and we will never get to zero.

Senator MITCHELL. Well, if you do not continue to share the commitment expressed in the 1972 act, do you propose any formulation to reflect the extent of your present commitment?

Dr. HERNANDEZ. I think what we have said is that if you take the no discharge goal in that kind of general way of what was America trying to accomplish, and that is to remove those pollutants that have an impact on stream life, we are going to do that. If you take it in a more literal sense, then in that narrowest definition of removing all materials out of water, it is an indefensible argument and one we can't support.

What we do believe is that it, like all kinds of goals, all of our national acts have goals associated with them, full employment goals, that people who put money into Federal banks will be fully insured, yet we know occasionally we don't have full employment—is a target, and in a logical kind of way of where we are going, and I think in that sense it is a good idea.

Senator MITCHELL. Do leave it in?

Dr. HERNANDEZ. Absolutely, I wouldn't change it. I think maintaining it as a goal, as an objective in that general sense that we are talking about, to remove those things that have some kind of adverse effect on stream life, on human life, that we can identify, we should try to remove those things and control them.

Senator MITCHELL. I will come back.

Senator CHAFEE. We will have another round. We have only a total of three witnesses this morning and I think this is one day where we can explore these matters thoroughly and go around until everybody is satisfied. Why don't you proceed, Senator Gorton.

Senator GORTON. Perhaps my question will be the next question that Senator Mitchell would have asked. That is very easy to describe in a lenghty statement such as this, but how do you propose to make that distinction in statutory language?

Dr. HERNANDEZ. Well, I think it is in there now, in a way. When you look at what are the operational pieces, they are that EPA develops water quality criteria, which we have, for toxic pollutants

and many others. These criteria become the framework for the State water quality standards, and the States have identified a particular use or uses. Typically, there are multiple uses of a reach of a river, and States take a look at our criteria, and then, using our criteria, identify those stream standards that must be attained. And because that is how you determine whether we should endeavor to remove waste from the stream, we should retain those water quality standards. So I think the act is workable. The act is whole and it is intact. I don't think anything need be done in that sense.

Senator GORTON. Let me go back to one of the questions which Senator Chafee asked. You have a specific 1988 deadline. You spoke of an alternative in which compliance deadlines would be a function of when EPA itself finishes its own work and sets standards. Which of those two do you consider to be more desirable? Why isn't the latter a part of your bill rather than a date which may or may not be realistic?

Dr. HERNANDEZ. I think that wherever we can give people certainty they are much more comfortable. When you say some individual is going to work with your company, with your municipality in writing a permit, and based on that permit you must do this act at some future time, there is always that feeling of negotiability, of not being even-handed, of it not being equitable to all those impacted. To avoid that, because human beings are human beings, to provide some kind of certainty, we have gone to the approach of providing a specific date in here.

Senator GORTON. To the extent we were to go to the approach which was date-specific only in the sense that it was a given number of months after a standard was promulgated, would the same number of months be appropriate for every standard or will some be more easier to achieve than others?

Dr. HERNANDEZ. I think that clearly some industries can achieve things within 36 months, others require a shorter period of time.

Senator GORTON. I am not speaking so much of industries as of the removal of control or particular kinds of pollutants.

Dr. HERNANDEZ. What happens is that typically they will go into a construction program where they will build units that are capable of doing multiple activities. And I think a good example of this is the one in the steel industry, where we wrote their rules for BAT as well as final BPT rules. Some of the steel industry is going to have to build some new facilities to meet the BPT rule. However, they are not going to build first for a BPT and then a BAT rule. It will be one treatment facility that will accomplish the whole thing. So they will accomplish it as a unit. So it is the unit date that is important rather than the component pieces.

Senator GORTON. Mr. Chairman, thank you.

Senator CHAFEE. Dr. Hernandez, in response to Senator Gorton's question you remarked a necessity for certainty in dealing with industry, that industry wants to know what is going to happen, and you question the fact the lack of universality raises problems. Now it seems to me that gets to the very heart of the BAT waiver. In your long statement you haven't ruled out absolutely the BAT waiver approach. Yet doesn't that raise every kind of problem that you have documented as being a difficulty in response to Senator Gorton's question?

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Dr. HERNANDEZ. I think that is an excellent point and one that we have answered in the past by saying there are possibilities for exemptions under the act currently, and we said we are willing to accept that approach, that we have to go on down the line putting things into effect and allowing people to apply for certain kinds of exemptions. I think there are about four sections of the act that already allow some kind of exemption process. There are none for BAT toxics rules today.

It is premature today to try to provide a BAT exemption rule. If you did it in a timely fashion, if industry came forward with the right kind of information and the debate takes place in the Congress to decide whether it is needed that would be constructive and appropriate. Today I don't know whether we can say here's how many cases it is needed in, here's how many cases there is treatment for treatment's sake. I think if we did it in a timely fashion we wouldn't run into that problem of leaving things ambiguous and unknown.

Senator CHAFEE. You keep talking about treatment for treatment's sake as somehow under this act that is possible. But BAT is aimed at toxics, and when you are treating for toxics and attempting to remove toxics, I don't fall for the rule that you are just doing it for treatment's sake.

Dr. HERNANDEZ. What happens is we have to write nationally applicable guidelines. They are applicable not to a specific industry but to all the industries in that class whether or not they have absolutely identical processes and regardless of the kinds of receiving waters they go into. In order to do this we have to protect for those cases where we find certain kinds of toxics going out into certain kinds of streams. In order to make sure we provide protection, we set those treatment technologies to remove those materials. Now when you then come back at some other plant that is slightly different in process, that has a different discharge regime, may not have exactly the same kind of flow and it may discharge into a receiving water where there is no impact on that receiving water for that material, then in that case we are providing treatment without any benefits to society, at a significant cost. We believe we should allow people to make a case and apply for some kind of a waiver.

We have done that with municipalities, and we didn't say whether or not the municipality had any industrial discharge or not and we allowed them to discharge into oceans after some kind of preliminary treatment provided there is no adverse impact on the ocean out there where the outfall is. We have had a lot of experience with that process and we feel that if an industry could make a case someplace down the line and we have an appropriate set of rules, which we are not proposing to you today, that would be a good way to approach this question. We are leaving this for one of the things of future discussion.

Senator CHAFEE. Well, let's discuss this a little more. It seems to me you are moving into a water quality argument here. You talk about the receiving stream. Some receiving streams, you suggest it would be all right for them to take on toxics. Is that what you are saying?

Dr. HERNANDEZ. Well, I think these are going to be quite limited, where someone can prove that there are no adverse consequences and that, therefore, they don't have to provide this particular kind of control. We haven't formalized yet what we are looking at in terms of controls, and that is one of the reasons we haven't come to you with a request at this time.

Senator CHAFEE. Well, the whole objective of the efforts we are taking here is, as you have said in response to Senator Mitchell's questions, is to clean up the streams and rivers. And if you find one rather foul and you say it might not do any harm just to add a little more, we are just starting down the wrong track here.

Dr. HERNANDEZ. No; I wouldn't want to put those kinds of words in there at all, put in a little more. I think we have to meet the water quality standards, and that is the test of being clean.

Mr. EIDSNESS. Senator Chafee, I think there is a great deal of confusion as to the role of water quality standards as a regulatory tool under current law versus water quality standards under previous laws. Unless we clarify what the role is, it is toing to be awfully hard to focus. The current law requires the Agency to promulgate technology-based standards, including BAT technologies, and each industry is now required to meet those limitations which are written in its permit. The law also requires that water quality standards be met and a permit written, a legally enforceable permit, defining restrictions for contaminants, including toxics, for that industry facility. Right now if we write a BAT limitation that is insufficient to protect water quality, it is the responsibility of the State, and EPA in its oversight role to enforce that. The next step, water quality, is reflected in that permit. So you could have a situation where water quality is more stringent than BAT requirements. We have seen this in the past. EPA and States have issued permits in the past where consideration of water quality is more stringent and the discharge limitations for that industry could go beyond what would be in the BPT requirements in the old provision, now BAT technology. BAT technology may be more stringent than you would need to protect water quality standards, and that is the treatment for treatment's sake situation we are talking about. The fact of the matter is water quality standards are enforceable. There are permits written for toxic substances when they are present in toxic amounts. There was no enforcement tool under the old law and, on that basis, I understand your concern. I was with the Water Pollution Control Administration back in those days where there was no enforcement tool. We now have that.

Senator CHAFEE. Well, my time is up. Senator Mitchell?

Senator MITCHELL. Thank you, Mr. Chairman.

Dr. Hernandez, I have before me a document entitled "Analysis of EPA Proposals for Amending the Clean Water Act" that was prepared by the Natural Resources Defense Council, dated April 8, 1982. I don't know if it is still timely. What I would like to do is take just some of the summaries that are rather brief sentences, read them to you, and ask you to comment. You may well have seen this document, and it is probably an understatement to say it is critical of the proposals. I guess that doesn't surprise you.

So why don't I begin with the statement here. This is a summary regarding pretreatment. And I will read each one and ask you to respond if you will.

This says that:

EPA proposes to: (1) abandon mandatory, national pretreatment standards for toxic industrial discharges into municipal sewage plants; and (2) create waivers for any industries that EPA may choose to regulate. This is a major retreat from the act's emphasis on uniform treatment technology for industrial toxics. The proposal would eliminate long-standing Federal leadership in this area, and place enormous financial and political burdens on the cities by requiring scientific and technical investigations for which there are not enough data, methods or technical resources. As a result, the serious toxics problems caused by these discharges will continue.

What is your response to that?

Dr. HERNANDEZ. First, the April 8 dateline refers to a set of proposals that were circulated amongst the agencies way before they were finalized. We didn't send them to Congress until May 25. However, I think I can speak to some of those things.

What we propose to do is maintain everything intact that the current law provides with the exception of giving the agency flexibility to allow municipalities, through a certification process that is well spelled out in the act in terms of all the things they have to do to meet this test, to run their own pretreatment program, one that they have in effect right now, and many cities do that.

The current pretreatment rules are quite complicated and place a huge burden on the POTW's, on these municipal systems. Our proposal won't change that, except to allow the flexibility of having them use their own system rather than for us to intercede between them and industries with EPA rules that are specific to each of these industries. Now we want to go on and adopt these categorical rules for something like six to nine industries, industrial groups. So if a municipality doesn't opt to run their own program, then we in fact have the rules in place to require pretreatment. So I really believe it is changed some.

Senator MITCHELL. Well, I have just been given their up-to-date comments which say that the final version is far more complex and damaging than the preliminary proposal.

Dr. HERNANDEZ. It probably is more complex, but it is just a difficult technical issue, that is all.

Senator MITCHELL. Well, it says, and rather than my trying to paraphrase it I will read it, it says, "In addition to the two components described earlier," which I have already commented on:

EPA now proposes an exemption for municipal plants. Thus, any of the three partners in pretreatment could opt out: EPA by not issuing standards; cities by gaining exemptions from the program; and industrial sources by obtaining waivers. The new proposal is significantly different in its mechanics and its benchmarks, and it contains several subtle but damaging changes.

Would you comment on that?

Dr. HERNANDEZ. There is not a whole lot of specifics in there and you have to talk about specifics.

Senator MITCHELL. In fairness to them, they follow several pages of specifics, but I don't think my time would permit me to read all this and ask you to comment on them.

Dr. HERNANDEZ. This is a terribly tough issue. It is not an easy one. I think Senator Gorton and you yourself said we should have technical corrections. This is a technical correction. This is an issue

of how do you make something work in a flexible and better way. We plan to go on ahead and adopt those categorical pretreatment requirements, not necessarily for every industry because some of them just don't have a lot of toxics in their discharges.

I think I can give you some example of the numbers I have from the various kinds of industries and industrial flows of toxic materials. When you look at those, you will find that the volume of toxics coming out of some industries is quite small, and to set some kind of pretreatment, categorical pretreatment, requirement is probably unnecessary for those. The major ones where we feel there is a serious issue we will go ahead and set them because the municipality has to have the tool and we have to have the tool should they opt not to run the program.

Senator MITCHELL. I can see my time is up. I am sure someone from the NRDC will be here and comment before this is over. One of the problems for this hearing procedure is you get one set of assertions. I am used to being in a courtroom, where when you make a statement there is a guy sitting next to you ready to get up and challenge it. I think you bring up more of the truth of the matter in those circumstances and more appropriate problems. That is why I am going through this.

Dr. HERNANDEZ. Senator Mitchell, one of the things I would like to tell you, though there are people who disagree, relates to the consent decree NRDC has against us. I think they have a built-in interest to go on and see the things in the consent decree held to. So you have to keep that in mind. Then let's take a look at another group that has an interest, and that is the municipalities. The language we have is one that has been suggested to us in part by an organization that represents the roughly 100 largest cities in the United States. They feel that EPA's mandatory categorical standard will impose great chaos in their cities' systems and that they can best run them, and they have suggested this as a route. We have got some really tough tests in here to make sure. So there are lots of people out there who believe we need to have this kind of flexible change. I have letters from half a dozen State Governors saying words like that, various kinds of associations, the State Sanitary Officers Association, people like that. So there is a strong bias on the other side to provide some kind of flexibility.

Now not all of us agree on what it is, and I think that is a task we have to go through. The challenge is how do we do this in a rational way that meets the environmental needs without having government from Washington, D.C., running everything in all of our municipalities across the country, but still provide that where needed we will be there.

Senator MITCHELL. Thank you, doctor. I see my time is up. I have more questions, but I will defer to you.

Senator CHAFEE. Dr. Hernandez, it is my understanding that the Chemical Manufacturers' Association, with EPA, produced a joint report, and it is also my understanding that this provides data indicating that combined physical, chemical, and biological treatment processes achieved significant reductions of toxics within five specific chemical plants. Now my question is as follows: What was the purpose of this study from EPA's perspective?

Mr. EIDSNESS. Senator Chafee, if I may answer that question. The study was designed to complement an effort that was already underway at EPA to determine the effectiveness of treatment of a variety of pollutants, and EPA basically designed the study and set the parameters for CMA to carry it out. There is some confusion, however, as to whether the conclusions of the study are EPA's or CMA's or both. EPA has not completed its analysis of the data which was developed as a basis of that study. So until we have done that we really can't say specifically what the conclusion would be.

But I can say, if you want to hear it, if CMA's conclusions are correct, I can tell you what those are.

Senator CHAFEE. Well, I get nervous in having the Federal Government collaborate with one of the regulatees on producing a study that is dealing with what kind of regulations are going to apply to those who have collaborated in the study.

Mr. EIDSNESS. Well, studies of this nature—I don't know whether "collaborate" is the correct word.

Senator CHAFEE. Who paid for it?

Mr. EIDSNESS. CMA paid for the actual work that was done, Senator.

Senator CHAFEE. So then it comes up with a label of EPA and CMA; is that right?

Dr. HERNANDEZ. I don't think that would happen unless it goes through a peer review process and we put our stamp on it that it is in fact accurate and that it is an EPA publication. Otherwise what has come out so far is a CMA interpretation of that work.

Senator CHAFEE. CMA is fine, I have nothing against CMA but if it is a CMA study, so be it, and I don't think it should have the imprimatur of EPA anywhere on it.

Mr. EIDSNESS. Senator Chafee, we did not lend EPA's name to that study. When I became aware of the fact that EPA's name was on the report itself, I wrote CMA to tell them we were not prepared to meet with them to discuss—I was not prepared to meet with their director to discuss the results of their analysis until my staff had completed its analysis. I understand just yesterday my staff met with CMA technical people to go over my staff's analysis of the data. So just to clarify, we did not lend our name to that study.

Senator CHAFEE. So it is inaccurate to call it a joint report?

Mr. EIDSNESS. It is inaccurate to call it a joint study, and the conclusions reached by CMA in that study do not reflect the conclusions of the Environmental Protection Agency. We have not completed our analysis and it has not gone to peer review.

Senator CHAFEE. What does the cover of the report say?

Mr. EIDSNESS. I don't recall.

Senator CHAFEE. Are there indications it is a joint study?

Dr. HERNANDEZ. We didn't print that.

Senator CHAFEE. I am not saying you printed it. They printed it. But if they printed it and called it a joint study, I think you ought to get that straightened out.

Dr. HERNANDEZ. We participate with so many groups on different things, technical associations, Water Pollution Control Federation, American Society of Civil Engineers, the air pollution people. This

is one of those ways of working together on things, and I think it is an important part of life. Oftentimes you will have conferences where the conference proceedings will bear the stamp of a lot of different organizations. We have tried to make sure when our name goes on something that it is in fact approved by us by a peer review process we have in place, or it says this has not been reviewed by the EPA and does not represent the Agency's belief. Certainly if we had seen the CMA report ahead of time we probably would have said that.

Senator CHAFEE. Mr. Eidsness, what conclusions can be drawn from the report? What were the conclusions of the report?

Mr. EIDSNESS. Well, the best I can give you, Senator, is sort of a paraphrase of the conclusions that were reached by CMA in the report. They are as follows:

The final effluent concentrations of those priority pollutants which were analyzed in the study are generally low in the five plants which composed the study. Second, there were substantial reductions of the priority pollutants analyzed by biological treatment systems utilized at the five plants. Finally, the study demonstrates these five treatment systems, which were biological and other physical processes, are effective in removing significant quantities of the priority organic pollutants.

Once again, these are not EPA's conclusions, and it is sort of a paraphrase of the conclusions reached in the CMA study.

Senator CHAFEE. OK, I want to get into pretreatment, but, Senator Mitchell, why don't you finish your line of questioning and on the next round I will get into pretreatment.

Senator MITCHELL. Well, I am going to continue as I did before, reading and asking you, Dr. Hernandez, to comment to the extent the comment is out of date, if you would respond to the criticism.

This deals with the BAT deadlines. It states:

> EPA proposes to (1) delay its duty to issue best available technology regulations for toxics until July 1, 1984.

I think that's out of date now.

> (2) Remove its obligation to review BAT rules every year; and (3) roll back industrial dischargers' compliance deadline from 1984 to 1988. These amendments are designed to undermine EPA's court-ordered responsibilities on toxics control, and to give industry an inordinate stretchout of their obligations.

Dr. HERNANDEZ. Well, I think we have already discussed earlier today the 1988 deadline and why we selected it and what the other alternatives are. And you have indicated some of those court ordered deadlines are June of 1984, the latest, and I think there are four of them that fall in that June 1984 classification. What we are asking for is July 1 of 1984 because I believe it is appropriate for the Congress of the United States to set those guidelines rather than to have them mandated by a court decree. Now I realize a change in that date by Congress does not change the court decree, but it would give us an opportunity to go back to the judge and say the Congress has looked at this and has decided this is an appropriate date and we ask that this date be set.

Senator MITCHELL. So you could convince the judge you could convince the Congress, and therefore you use that to convince the judge the second time around.

Dr. HERNANDEZ. We are asking for a 1-day difference.

Senator MITCHELL. For one only?

Dr. HERNANDEZ. For four rules. We are asking they all come up the same date rather than staggered along.

Senator MITCHELL. So it would not be a 1-day difference for everything.

Dr. HERNANDEZ. No; it would give us some flexibility in getting them done and we feel would provide us with a little better management tool in the Agency and probably a better rule by that process, and I think you have to take that into consideration.

Senator MITCHELL. Well, when I was a judge I thought everything I did was right. Now that I am not——

Dr. HERNANDEZ. It is marvelous how changing positions changes one's attitude.

Senator MITCHELL. You have experienced that, I guess.

Dr. HERNANDEZ. Yes, sir.

Senator MITCHELL. The next area I would like to discuss, again just reading down this list, involves permits. I will again just read it:

> EPA proposed to increase the maximum term of all Clean Water Act permits from five years to ten. This increase will ensure that polluters are protected from more stringent requirements under the Act for a decade. There will not be opportunities to require upgraded treatment—even if justified by advances in technology, cost-saving innovations, discoveries of new toxics hazards, or decisions by States to increase the protection of their water resources.

What is your comment to that, Dr. Hernandez?

Dr. HERNANDEZ. Well, first, we are not giving people a decade of free ride, so to speak. I think you have to look at what kinds of things go into the building of a permit and how they were done originally. When they were originally written, they were done on best engineering judgment, best professional judgment because there were just no rules out there. So the first rounds that were done between 1974 and 1976, they were based on what can we do. They are expiring in the 1981-82 period and are being reviewed. Some of them will come up again this year. And it was the initial setting of the subsequent review, where you said, are we on target, are we doing what is right, and rules updating them to make sure they complied, that we have gone through the philosophical issues, or, are we meeting the needs of this stream or industry or municipality. Once we get through the second hoop, doing them again in 5 years, we don't believe serves any purpose. We believe it is redundant and not necessary. We believe going through them for a second time and doing them for a third time in another 5 years is probably not a useful tool. There are something like 65,000 of them. The amount of money we spent on this is on the order of $10 million a year right now. We feel that we can save the States money and ourselves by doing it at a less frequent interval.

Now you say, how is it we make sure we are not giving people a free ride? Well, as these new BAT rules come on line, our regulations today provide for a reopening of the permit, rewriting of it. Many of the permits that will be written today will anticipate what the rule is going to be and ask them to do these things—before the final deadline before they have to have them—on a permit compliance schedule so they will do these things. If a waste stream

changes, we can go back and reopen it; either the industry, if they are doing less, or ourselves if we feel that they have added to the nature and volume of the waste stream, we can go back in and reopen the permit. I think that applies. The idea that somebody can get away with polluting for 10 years is not true. The rule remains in effect and you can go out there and enforce it at any time during this period.

Mr. EIDSNESS. Senator Mitchell, I also add another condition under which we would want to revise the permit is where water quality standards are changed or modified requiring more controls. That would be another reason for permitting authority. The EPA would want to go in even if it was a 10-year limit, even if it was a permit requirement.

Senator CHAFEE. Dr. Hernandez, I would like to turn to pretreatment for a minute. As I understand the proposals that you submitted, they provide that the Administrator is to have discretion as regards the issuance of it industry by industry, the so-called categorical pretreatment standards. Why?

Dr. HERNANDEZ. Well, some of these industries there could be as many as 34 categorical groups and subcategories, more than that. Many of these don't have significant toxic discharges such that you would have to write a categorical standards for them, or they don't predominantly discharge into municipal systems. Now there are some particular industries that are small, found in urban areas, that discharge into municipal systems. And the bulk of those constitute typically the metal platers, metal finishers, and the plastics industry. We feel there are something like nine different groups that have significant volumes of toxics associated with them. That is why we would base it on the need to do something.

Senator CHAFEE. You have agreed to promulgate these categorical pretreatment standards on a specified schedule? Now, if you give the Administrator the discretion to issue or not to issue these pretreatment standards, where are you then?

Dr. HERNANDEZ. We have already issued some and the rest will be part of the BAT rules as they come along the line. Some of those will be guidelines, some of them will be mandatory. We are going to provide the basic information on many of these things, but some of them will not be in the same format. So the information will be provided. Now I just don't believe that the Congress has to rely on the courts to tell Federal agencies what to do.

Senator CHAFEE. Well, except you have entered a consent decree.

Dr. HERNANDEZ. Yes, sir.

Mr. EIDSNESS. Senator Chafee, if I may, we have learned a lot since 1976 when that consent decree was signed. The Agency has done extensive field work, spent $120 million in contractor money going out getting data from industry, and determining the effects of treatment. We also instituted what we call a 40-city study to determine the efficiency of removal of toxics from conventional biological municipal treatment facilities. We have conducted a regulatory impact analysis. All of this large body of data has led us to conclude there are a number of industries who are indirect dischargers of toxics but the toxics don't pass through the facilities. Therefore, it doesn't seem to make sense to promulgate rules for things that are not a problem.

I should point out, and I think it is our intent, we would still prepare the technical guidelines for the industry that we would not regulate, if given the discretion, so those municipalities who are developing their own local programs will have the benefit of our analysis and the technical study done to determine the appropriate roles for these industries which we did not choose to promulgate categorical pretreatment requirements.

Senator CHAFEE. Even if EPA decides to promulgate categorical standards, your proposal, as I read it, would not require that they be technologically based. Is this correct?

Mr. EIDSNESS. No; they are absolutely technology-based requirements. Really the pretreatment requirement is very similar to the effluent guidelines; they are based on the same kinds of considerations.

Senator CHAFEE. What we will have to do is get back to you and see where is the difference in our interpretation of that matter, whether they are technology based or not.

Mr. EIDSNESS. We intended it to be technology based. The intent was to clearly promulgate categorical standards based on technology.

Senator CHAFEE. Let me go now to the exemptions that you would be granting to the publicly owned treatment works to run their own programs, as it were. Since the exemption condition requires the POTW to have adequate legal, financial, technical, analytical, administrative, authority to insure the successful operation of a pretreatment program, that makes me somewhat skeptical. What do you mean by "adequate?" Who does the judging?

Dr. HERNANDEZ. I think EPA would. They send us a plan and States will have to approve it before we will accept it, and so there is the process of people reviewing this in terms of adequacy. The interesting thing, Senator, is that our existing pretreatment requirements place these same demands upon municipalities to essentially the same extent. There is a well written article in the recent Journal of the Water Pollution Control Federation that outlines each of the things municipalities must now do to meet EPA pretreatment regulations. Under ours they won't have to do anything different at all except say we want to run our own program.

Senator CHAFEE. Who is going to monitor things? I am not clear how it is going to work if you give an exemption to Chicago to handle its own pretreatment.

Mr. EIDSNESS. The amendments we propose provide for an annual recertification by the municipality.

Senator CHAFEE. By the municipality?

Mr. EIDSNESS. By the municipality.

Senator CHAFEE. You mean they recertify themselves?

Mr. EIDSNESS. In effect, yes. Now we would have to write rules or guidance on exactly how that would be done and what showing, if any, would have to be provided to the reviewing agency, whether it be the State or EPA. More importantly, I think the incentive for doing a good job and keeping your program working properly is going to be very great on a municipality because the sanction for not doing so is that, one, we can withdraw the exemption and then they are required to go back and follow all the Federal requirements on the general requirements and categorical where we prom-

ulgate. That is a pretty heavy sanction to impose. The other sanction is that if there is a passthrough of pollutants that violates the permit conditions, we enforce against them under the enforcement provisions of the Clean Water Act. It is not as if there is a not a Federal presence. It is an annual Federal presence on the annual recertification.

Senator CHAFEE. Yes; they recertify they are doing a fine job, so I am skeptical about that. But who is going to do the inspection to make sure they are doing a fine job?

Mr. EIDSNESS. EPA and the States currently go out during the summertime when the weather is nice and do physical inspections of facilities, where the monitoring reports give us concern with regard to effluent conditions. This is a function that will also be by the State if it is the permit issuing authority. So we will be able to ascertain during those inspections the extent to which they are meeting their requirements.

Senator CHAFEE. Well, I just hope there is this careful monitoring. After all, the whole purpose is the Federal Government is paying 75 percent of these facilities and it behooves us in the national interest to make sure they are kept up to snuff and indeed their discharges meet the permit requirements.

Mr. EIDSNESS. This I think is an excellent question, the question of how do you know the certificate is in fact happening. I have tried to answer it in terms of the enforcement and sanction of taking back the requirements once we discover something. But the way I envision this thing proceeding, Senator, and we have sort of fleshed this out, we would basically at the time the applicant, the municipality, submitted its application certifying all these things, one thing that would have to happen is that the State would have to certify there is a permit which addresses water quality standards that limits toxic pollutants that are passing through. That would have to be done to begin with. Second, I would envision EPA would publish notice in the Federal Register of our intent to certify or approve or reapprove an application or recertification and ask for public comment. And based on the comment we would receive, if we felt that there was some discrepancy between what the municipality alleged versus comments made by the public, or based on our review of the permit and inspection, then we would have the right to go and require the municipality to prove what they say they have in fact done.

Senator CHAFEE. Well, you are putting a tremendous burden on the public. A lot of these elements the public would never know about, won't have the capacity to monitor; and to expect the public to be able to respond it seems to me is not accurate.

Mr. EIDSNESS. Well, we won't rely wholly on that. Even under the current ocean discharge waiver provisions of section 301, there is a procedure to allow the public to question either the State or us as to the propriety of the application. We would also have a substantial amount of information ourselves to make a determination from construction and development of general pretreatment programs and the supporting documentation. So we would be able to go into the records and see, in fact, what the municipality has done. In addition, we have the compliance reports they submit to us or the State, and we will know whether or not they have met

the secondary treatment requirement, which is a precondition for even a consideration for an exemption.

So I think it will be a dual responsibility, but clearly the ultimate burden will be on the EPA or State, as it is the issuing authority.

Senator CHAFEE. Well, we have some questions to submit for you to answer, Dr. Hernandez.

Senator MITCHELL. Just let me say, Dr. Hernandez, I would like to submit to you in writing the remainder of these several critiques of the proposals and ask you to respond in writing to them, if you would please, along the lines we have done previously.

Dr. HERNANDEZ. Yes, sir.

Senator MITCHELL. I don't want Ms. Dinkins to feel left out here so I would like to ask her just one question.

As you know, the proposed changes include making certain violations of the act felonies as opposed to misdemeanors. The proposal, as I understand it, is to delete the word "willful" and insert "knowing violation," which would make it a felony, and retain the misdemeanor provisions for negligent violations. Do you support that proposed change?

Ms. DINKINS. Yes; Senator, we do very strongly support that provision.

Senator MITCHELL. And is the Department of Justice prepared to vigorously enforce the law both in terms of making available the necessary resources to do so and in actually seeking to impose felony sanctions where that is appropriate?

Ms. DINKINS. Yes, sir, we are very committed to a criminal enforcement program. We think that is an excellent way to deter violations of the statute. We have worked with the EPA which now has a criminal program actively in effect, and we have also begun to work with the FBI to make sure these types of activities are investigated and if appropriate prepared for prosecution.

Senator MITCHELL. Would you give me in writing, Ms. Dinkins, a summary of enforcement activities since January 1981 under the act, and both in terms of absolute numbers and type of cases and then a comparison with the prior 18 months before that?

Ms. DINKINS. Yes, sir. You are principally interested in criminal prosecution?

Senator MITCHELL. Yes, right.

Ms. DINKINS. Yes; we can do that. We would be glad to do that.

Senator MITCHELL. Would you just give me a letter to that effect.

Thank you, Mr. Chairman. I will submit the rest of mine.

Senator CHAFEE. If you would respond, gentlemen and Ms. Dinkins, to the questions that are submitted.

I have one question for Mr. Farbrother, representing the Department of Defense. Under these amendments you are seeking some changes to the Presidential exemption; is that correct?

Mr. FARBROTHER. Yes, sir.

Senator CHAFEE. What is the matter with the present exemption? Why do you want to change them?

Mr. FARBROTHER. When we were over the past several years running mobilization exercises within the Department of Defense, thinking carefully through all the steps that would have to be taken if we were to be engaged or our allies engaged in major con-

ventional conflicts, we discovered a number of impediments. One of the impediments to mobilization we found was in the Clean Water Act. Specifically, under certain scenarios we would have to put into full production a number of Army ammunition plants that are now in reserve. Those plants, we would anticipate, would produce toxics and would be considered new sources since some of them are not operating at all now. The current law does not give even the President the power to exempt such activities, and we wouldn't be able to put them into production. We are seeking that kind of legal authority here now so that we don't have interference with the Nation's ability to mobilize and defend itself.

Senator CHAFEE. It wouldn't have any interference with the nice substantial outflow of toxics, would it?

Mr. FARBROTHER. There wouldn't be an immediate interference. Senator, as we see it, the control of toxics and all sorts of hazardous materials in our environment is a top priority for the Nation at all times. During times of military emergencies, I believe there is a higher priority, and that is the defense of the Nation. Under those circumstances, we seek the flexibility to put into operation certain industrial plants, with the understanding that we will bring them into compliance as soon as possible.

Senator CHAFEE. What would constitute the emergency? Would you call it a declaration of a national emergency or something to that effect?

Mr. FARBROTHER. The provision that we are requesting, that would be operative only in cases where the President or the Congress declared a state of war or national emergency. However, we can envision circumstances short of those kinds of declarations where we would still have to step up our production of ammunition. Those conditions would also be covered by the amendment we are seeking.

Senator CHAFEE. Doesn't the declaration of a national emergency occur fairly often?

Mr. FARBROTHER. I am not familiar with that. What I can say, though, is that the President under the current law has had exemption authority for certain—not toxics and not new sources, but with other pollutants, and that the Defense Department has never had such an exemption. So it is not at all a common occurrence for us.

Senator CHAFEE. All right, fine. Thank you all very much for coming here.

Dr. HERNANDEZ. Senator Chafee, I wonder if I might make one statement in summary.

Your initial concerns were we not start in on a new mid-course correction. We are not proposing another mid-course correction. I think we can characterize what we propose in two groups—one technical corrections that deal with deadline changes, dams and nonpoint sources, issues like that, and then there are at least 7 of our 15 changes that are designed to enhance EPA and State administration of the act, administrative, civil penalties, felony penalties, partial delegation, extension of permit life, environmental modification fees so we can charge for people requesting specific waivers and exemptions and that 5-year authorization period we have talked about. So I believe those are designed to help us in imple-

mentation of the act, as is the pretreatment issue. And I would characterize our changes as following in those things and not mid-term correction.

Senator CHAFEE. I think you are right. We appreciate your being here.

Senator Randolph, do you have a statement?

Senator RANDOLPH. Mr. Chairman, first, I want to say that a member cannot be two or three places at the same time.

Senator CHAFEE. That probably applies to even those who aren't members.

Senator RANDOLPH. In the Labor and Human Resources Committee this morning, there were matters of concern there that seemed to call for membership in as large a number as possible.

I will not take the time to make a statement. I want to say to you, Mr. Chairman, that I have joined in the cosponsorship of S. 2652. I feel that this is a very well reasoned approach, and there are certain amendments to the Clean Water Act which, after experience, seem to be valid. I think that is so with most any legislation that we pass. The oversight, the review, the study of how an agency handles that which has come from this committee and then ultimately the Congress is very important.

The matter of clean water in America is a subject I think that is very, very important. The water levels—and that is not an issue here—have dropped precipitously in States. You would hardly understand how that could take place. But throughout America, regardless of whether the water is clean or contaminated, the water level in this country is a very severe problem as it constantly sinks. Is that right, Dr. Hernandez?

Dr. HERNANDEZ. That is right. That whole Midwestern basin that goes from Nebraska, Kansas, Texas, and a part of New Mexico, the water levels in the Ogallala formation are declining, and one of these days we are going to be at the end of the straw with nothing coming up.

Senator RANDOLPH. I appreciate your making that statement because it is a fact. I think charged with the responsibility which, under your leadership, Senator Chafee, will be a matter of continuing effort within this committee to understand the problem, try in the legislative way to do what we can. This is a priority in the committee as often other matters are a priority.

I have recently seen some streams which were once alive with game fish that are not alive with game fish today. But I have seen other streams that were very, very heavily polluted that are now filled with game fish. And so we find on both sides of this issue situations which concern us and worry us. And I, Dr. Hernandez, have been convinced that you and your associates are attempting to do a constructive job in this field.

Dr. HERNANDEZ. Thank you, sir.

Senator RANDOLPH. I feel that very strongly. Not only did I meet with you when you were a nominee, but also to continue with you and your staff to try to work forward with you and for the people of the country as we go through this subject matter.

Thank you, Mr. Chairman.

Senator CHAFEE. Thank you very much, Senator Randolph. No one on this committee has been a stronger supporter of this type of

legislation and indeed all legislation in the environmental field. So we appreciate your taking the time to come this morning.

Senator RANDOLPH. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you, Ms. Dinkins and gentlemen.

The next panel consists of Mr. William Haun, vice president of General Mills, for the National Environmental Development Association, and J. Taylor Banks from NRDC.

STATEMENTS OF WILLIAM HAUN, VICE PRESIDENT, GENERAL MILLS, ON BEHALF OF THE NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION, AND J. TAYLOR BANKS, STAFF ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, ACCOMPANIED BY JEFFREY ZIMMERMAN, NATIONAL ENVIRONMENTAL DEVELOPMENT ASSOCIATION

Senator CHAFEE. Mr. Haun, we welcome you here. You have a substantial statement, which we will put in the record, and I would suggest that you summarize it.

Mr. HAUN. Thank you very much. I will certainly do that. If you will permit me, I will wing it and we will talk about only two of the primary issues today.

First, this is sort of a homecoming to me, Senator Chafee. This is the third round of testimony on the Water Act, starting in 1971, and it is interesting to see the threads that run through this entire 10-year period.

NEDA believes the Clean Water Act has been basically successful, and we agree with Dr. Hernandez and his people the cost has been high in dollars, man-hours, it certainly has been in wear and tear on public and private officials. But certainly we think since 1972 we have developed a lot of valuable insights on the workings of the act, both the strengths and weaknesses.

On the basis of this 10-year experience, we believe changes are needed that will continue to improve our work in protecting the Nation's water. The theme that we propose is that we should keep this act tough, we should keep it responsible, as it has been in the past. We think the law needs to be modified to encourage compliance, by reducing complexity and removing sources of confusion and endless friction between the regulated and regulator.

NEDA believes we needs a comprehensive review of the statute, not from the standpoint of throwing away the act, but insuring we don't throw away the experience we have gained in the administration and application of the act in this 10-year period. To this end, our technical committee, with approval of our steering committee, has presented a set of 10 issue papers we are providing to the committee in draft today. These will be printed a little later in more elegant form, but we think they should be made available to you today.

Those issues I think will be in the category primarily of technical adjustments, changes in the administrative framework of the act. The approach of technological standards with an overriding concern for water quality, which is built into the basic structure of the act, does not appear to require any fundamental change.

To address two specific standards, the effluent guideline and standards issue, and a whole group of issues revolving around the

permit process today, and these are based on the experience of our 22 companies and 15 labor organizations, the other members of NEDA, the input that has been made. The experience with biological treatment plants that has been gained since biological treatment was defined pretty much as BPT has shown what many of us suspected 10 years ago but really had no way to prove because we didn't have the analytical capability, and that is the micro-organisms in these plants are infinitely adaptable. They are able to consume large numbers of organic compounds, in particular, which are classified as toxic. They can overcome that toxicity by a process of mutation, by a process of adjustment of the population. And we think many of the studies that have been done, not only the CMA study but other studies, would indicate that, in many cases, we don't need a separate definition of BAT, that BPT is in fact projectable to the BAT performance standards. This is not necessarily true for all categories, but it should be possible for the Administrator in the process of developing the BAT guidelines to take that performance into account.

Basically, we are asking the statute be clarified so BAT, Senator, does not necessarily mean adding on an additional treatment step if it can be demonstrated the existing BPT is delivering effluent quality or water quality as originally required.

The act has always had, as Dr. Hernandez said, the two-track process, one the technology process in effluent guidelines and the other the water quality overriding in the event that the technology or standard was not sufficiently effective. Really in BAT it seems to us, given our analytical capabilities, which is at least 3 orders of magnitude higher than 10 years ago, that we ought to begin to think of some way of melding together BAT and BPT and not necessarily think of them as separate kinds of things.

On the permit process, which is built on the BAT/BPT system, one can hardly look at the permitting burden faced by the EPA without being daunted by the magnitude of statistics. There are 60,000 permits out there, most of which have to be renewed regularly. The periods may be as short as 2 years. The can be as long as 5. They have reopener requirements when circumstances change either in the stream itself, in the technology as the agency sees it, or in some change in operation within the company itself. We think the first place to start, as has already been recommended by the EPA, is an extension of the maximum length of time for the water permit, 10 years.

Now all these permits will have reopeners in them anyhow, but this would reduce the administrative burden, unclog the system, and we think save everybody a great deal of time and trouble.

Second, there are a large number of those permits, I can't tell you the number, but when one goes around to technical meetings on the subject it is clear many people in the business believe a large number of those 60,000 permits are being issued for what amounts to insignificant sources. They may be a small amount of clean city water being discharged into a stream. They may result from stormwater being channeled either around an industrial plant so it doesn't run across the property and get contaminated with pollutants or stormwater being channeled around a mine operation so it doesn't pick up pollutants. We think some of the de

minimis discharges at a level below which a permit is not required would be a desirable way of unloading that system, again without affecting water quality, and save everybody a lot of time and trouble.

We, for example, have been spending a fair amount of time in our company on corresponding on a permit in which we are discharging city water, drinking water, from an air-conditioning unit that violates the water quality standards for the stream because it has too much residual chlorine, the level required by the city to maintain drinking water standards. These kinds of requirements, while they are technical, they seem to be petty. Nonetheless, they take time and effort and accomplish little for water quality. These are the kinds of de minimis exemptions we would like to see.

Now as we move along towards the next stage of the permit, the BAT for toxic materials, our concern is that EPA has never been able to meet its deadlines on a promulgation of effluents.

Senator CHAFEE. Mr. Haun, I don't want to be too severe, but we are in a little bit of a bind here, and if you would move right along.

Mr. HAUN. All right, I will quickly move along.

EPA's schedule for publication of these things runs into 1984, but the 1983 dates we believe will be fractions over 29 court dates. NEDA's position is we would like to see a uniform 3-year period of compliance from the date of promulgation of the subcategory standard. That way people who have their standards today can move right ahead and get the work done. Those who don't get them until 1984 will still be in a reasonable position to comply in a timely fashion.

Again, I want to emphasize NEDA believes the act is sound. We would ask the committee to review our statement and the 14 issue papers we provided to you and your staff.

We would be happy to answer any questions that may arise.

Thank you very much.

Senator CHAFEE. Thank you very much, and your statement is helpful, Mr. Haun, and we appreciate your coming.

Senator Mitchell?

Senator MITCHELL. I have no questions at this time. I would like to wait and hear from Mr. Banks.

Senator CHAFEE. All right, Mr. Banks, why don't you proceed.

STATEMENT OF J. TAYLOR BANKS

Mr. BANKS. Thank you, Mr. Chairman. Good morning, Senator Mitchell.

Gentlemen, today's hearing opens what we think is another important chapter in the continuing review of our Nation's progress toward achieving clean water. We have come a long way under a decade of strong congressional leadership, but the toughest, most crucial stretch of road lies just ahead. In these hearings you will be examining the pace and the scope of our national program to control toxic water pollution.

NRDC coordinates and associates with a broad range of environmental organizations on these matters, with input from the National Audubon Society, the Sierra Club, the National Wildlife Federation, the Izaak Walton League, Clean Water Act project, Envi-

ronmental Policy Center, Trout Unlimited, and the Chesapeake Bay Foundation. We have a simple, straightforward message for Congress as it begins this reauthorizations process: You have done your job well. The Clean Water Act does not need to be changed. It should be reauthorized, without major amendments, for at least 4 years.

The American public wants a strong Clean Water Act. Over 90 percent of the citizens responding to a recent Harris survey either supported the act as it stands or wanted it strengthened—even considering the costs of pollution controls. The public looks to Congress, and particularly to the Senate's Environment and Public Works Committee, to carry out that mandate.

We urge Congress to maintain its leadership and control of clean water policies at the national level. To do that, we firmly believe you must reject the administration's and industry's proposed agenda. It would cripple a good statute. It would return, in large measure, to failed policies of the 1960's that Congress rejected 10 years ago. It makes no sense, and we oppose it absolutely.

By most accounts, the country's surface water has not deteriorated significantly due to conventional—oxygen depleting—pollution in the last 10 years. Despite substantial growth in population and increases in industrial output, we seem to have just about held our own. Even some dramatic improvements are apparent in specific water bodies around the Nation.

By contrast, the jury is still out on toxics. Water monitoring programs are neither comprehensive nor accurate enough to determine whether or not we have widespread, or even significant local toxics problems. Specific controls have not been implemented for industrial discharges of toxics, and scientists still cannot agree on how much of a given chemical is likely to be harmful to aquatic life and human health.

What we do know is that toxic metals and organic chemicals are discharged to our waters by the ton every day. EPA has estimated that for every year industrial controls are delayed under this statute, nearly 300 million excess pounds of toxic pollutants will be needlessly poured into America's waterways and sewer systems.

Senator MITCHELL. Repeat that again please.

Mr. BANKS. For every year that the controls we are talking about in this hearing are delayed, EPA estimates that nearly 300 million excess pounds of toxic pollutants will be needlessly poured into America's waterways and sewer systems. That figure represents the difference between current discharge levels (412 million pounds annually) and those expected after industrial sources meet their projected requirements (128 million pounds annually). If EPA's figures are correct, then today, July 21, 1982, over 800,000 excess pounds of these pollutants will be discharged. In the hour or so we will be discussing these matters, about 17 tons of excess toxic chemicals will be discharged to our waterways and sewers.

Senator CHAFEE. Gentlemen, we have an important vote, and I would like to go over and become informed more on this and vote and come back, if that is satisfactory with you, Senator Mitchell. So what I would suggest is that we recess for a few minutes and then we shall return and finish your statement, Mr. Banks.

[Brief recess.]

Senator CHAFEE. Now, gentlemen, we have a time problem unfortunately, which is not unfamiliar to both of you who have testified many times.

Mr. Banks, you or the NRDC, as I understand it, will be represented on other panels we have before we end these hearings.

Mr. BANKS. Yes, Mr. Chairman, and much of what I have to say in this statement will be repeated in those subjects.

Senator CHAFEE. On that basis, I would appreciate it if you move along because I have an appointment actually 5 minutes ago and Senator Mitchell has some time strains, too. So why don't you go ahead and finish up in 3 or 4 minutes.

Mr. BANKS. Mr. Chairman, I will conclude more quickly.

Mr. Chairman, stripped to the essentials, these hearings have to address the question of what to do about toxic chemicals in the absence of detailed knowledge about their effects on the aquatic environment. I think, fairly stated, to one side are the environmental organizations and I think the public. We believe that Congress was correct in 1972 and in 1977 when it required that there be action through technology-based requirements in the face of uncertainty about toxics. On the other side, I think EPA and the industries propose a variety of amendments that would reverse congressional policy by taking a wait-and-see approach to toxics control, relying more heavily on ambient considerations.

In our view, Congress would be making a serious, perhaps tragic, mistake if it accepted the EPA/industry proposals. They are fundamentally at odds with the Clean Water Act and with ordinary prudence. They are not the minor adjustments that Dr. Hernandez describes. They are subtle, yes, but they are not minor.

With that, I will conclude.

Senator CHAFEE. Which ones are you particularly talking about? The pretreatment are you talking about? In the long statement they discuss the BAT waiver, but they haven't asked for a BAT waiver. What are you particularly referring to?

Mr. BANKS. Certainly the pretreatment proposal, Mr. Chairman, is full of subtleties. For example, as you mentioned earlier this morning, that proposal would remove from the Clean Water Act all of Congress' directions to EPA about what a pretreatment standard ought to be, and merely would refer the Administrator to a list of factors that the Administrator may or may not consider. The current Clean Water Act tells the Administrator to base those standards on BAT and to prevent the discharge into municipal plants of any pollutant that would interfere with that operation or pass through into receiving waters. The subtlety is that EPA has removed all those directions in drafting this bill. If they are willing to put them back, then some of our quarrels with their proposals would be over.

Senator CHAFEE. Why don't you proceed, Mr. Banks.

Mr. BANKS. Mr. Chairman, I think I can conclude at that point, and if you have further questions I would be glad to address them.

Senator CHAFEE. I want to thank you, and we will study your paper. As you mentioned earlier, you or representatives of NRDC, as I understand, are on 2 panels that we have in the next 3 days of hearings.

Now you have a submission for the record also?

Mr. BANKS. Yes, Mr. Chairman.

Senator CHAFEE. A supplement?

Mr. BANKS. Mr. Chairman, I would propose that the analysis of EPA's bill and the supplement we have prepared today be included in the record.

Senator CHAFEE. Senator Mitchell.

Senator MITCHELL. Mr. Chairman, if you have to leave, why don't you go ahead. I have just a couple questions.

Senator CHAFEE. That will be fine, and if you will close the hearing I would appreciate it.

Thank you, gentlemen, both, very much. This is a complicated issue and we will be giving it a lot of thought and we appreciate both of you coming.

Mr. HAUN. Thank you.

Mr. BANKS. Thank you.

Senator MITCHELL [presiding]. I gather, although it isn't entirely clear at the moment, there is a substantial disagreement between you. Let me just take the one issue of permitting. Is there a disagreement between you on this bill, Mr. Haun? Do you perceive a disagreement between your position and that of Mr. Banks—and I ask you the same question, Mr. Banks—and if so, what is it?

Mr. HAUN. On permitting, I am not aware that there is a broad disagreement on this subject. I think we have talked about the issue here this morning. As a matter of fact, we both talked about reopeners and continued permits. And I think if we can agree on when a reopener was meant and what is discretionary on the part of the Administrator we won't be too far apart. To be frank, in the NEDA group we have not formulated a detailed position on what that reopener clause will be. I think we will be doing that in the near future.

Senator MITCHELL. Mr. Banks.

Mr. BANKS. Senator, our concern is that if 10-year permits are in place, then improvements in technology or cost-saving innovations that come along in that 10-year period might not find their way into the permits. For example, last year this committee told the States to review their water quality standards within 3 years. So they are in the process of doing that now. One of the purposes of doing so is to introduce toxics criteria into those standards. Most States do not have many toxics criteria in their water standards. This current revision process is when they have the opportunity to include them. If EPA drafts 10-year permits next year and those State standards are issued the following year or the year after, they might well just sit there for 8 years while industry complies with its existing permit. We just want to insure that those kinds of improvements and advances in our knowledge about toxics can be imposed in permits.

Now that can be done two ways. The first is to have those permits short in duration so that they expire and have to be reissued. The second is that they have a reopener clause. When certain events happen they can and should be reopened. Our primary difference of opinion with Mr. Haun probably is whether the duty to reopen is discretionary on the part of the Administrator or mandatory. We would hold the duty ought to be mandatory when it con-

cerns toxic pollutants, and that those permits would have to be revised during their 10-year life.

Mr. HAUN. Mr. Chairman, may I ask Mr. Zimmerman to respond. He is the chairman of the technical committee.

Senator MITCHELL. Let me just ask you a question, Mr. Zimmerman. As I understand what Mr. Banks has just said, it is that the reopener provisions which both Mr. Haun and Dr. Hernandez referred to are available in the event a violation of the permit occurs, in the event something happens where the permit is not adhered to, and that is well and good. But that doesn't address Mr. Banks' contention that that is a dynamic area in which improvements are being made, and that one of the purposes of a 5-year permit is to permit the incorporation in the reissuance of that permit of technological advances that have been made during that 5-year period. How do you address that?

And, Dr. Hernandez, you are still here. I won't ask you to both come back, but I would appreciate it if you would communicate to the committee how you respond to that. The mere availability of that doesn't deal with that. How do you respond?

Mr. ZIMMERMAN. Senator, our position is we think it is appropriate when those technological advances come along, when EPA would issue new guidelines, new effluent limitations, or the State would issue new water quality limitations, that that would be an appropriate basis for reopening the permit to incorporate those new provisions. We think, however, it ought to be a two-way street, that in the instance where a discharger who is operating under an existing permit changes his operation, for instance, shuts down part of his operation, is no longer discharging as much as he was before or the same mix of pollutants that he was before in accordance with his permit, that he would have an opportunity to reopen that permit as well to get it revised. The point of going from a 5-year to a 10-year permit is not to preclude advances in technology or understanding or cost effectiveness from becoming part of the permit, it is to unburden the system in terms of how frequently these things have to be reviewed in the general sense. If you write all permits for a very short duration, you will be rewriting many of them in areas where there has been no technological advance, and we feel simply extending that to 10 years does not hamper bringing those technological advances into the permit conditions when they come along.

Senator MITCHELL. Dr. Hernandez, do you have any problem with that?

Dr. HERNANDEZ. No, sir. In fact, I think Mr. Eidsness testified changing the water quality standards would be one of those times when permits would be reopened.

Senator MITCHELL. So although on the surface it appears to be some substantial disagreement, Mr. Banks, if you, as your statement suggests, believe that there are two methods of dealing with technology advances, one of which is a relatively shorter term, the other of which is provision to reopen in that event, would you have any problem if the 10-year provision were amended to include some mechanism for reopening under such circumstances?

Mr. BANKS. We would have absolutely no problem with such a formulation, Senator, as long as the reopener is an automatic

one—that is, it is triggered by the events we are discussing, and as long as the events, the list of events we are discussing is inclusive of all of the kinds of innovations and advances and improvements that we have discussed.

Senator MITCHELL. That might be a little hard to write down, wouldn't it?

Mr. BANKS. No, I think not. I think it would be quite easy. It would simply be advances in the variety of standards that are called for by this statute, and those could be listed in short order.

Senator MITCHELL. Would you submit that to the staff?

Mr. BANKS. I would be glad to.

Mr. HAUN. Senator, it is important to recognize the difference between mandatory and discretionary action by the Administrator. On the mandatory action Mr. Banks' organization would be in a position to enforce the requirement by civil suit.

Senator MITCHELL. Oh, yes.

Mr. HAUN. If it is discretionary, they would not. I think it is important to recognize what their interest in the mandatory reopener is.

Senator MITCHELL. I understand that, Mr. Haun, and I must say that I share some of their concerns in that area.

I think what I am getting at, Mr. Banks, is there seems to be some validity to their point, to the point being made by Mr. Haun and Dr. Hernandez. You have 10,000 permits out there. Not all of them are subject to the advances you have suggested, and perhaps some way can be found to accommodate the legitimate concern that Dr. Hernandez expressed without the adverse consequences which you fear might flow from that.

Mr. BANKS. Senator, without conceding that the concerns these gentlemen have raised are in fact real to the proportion that they would seem to indicate in their statements, I would agree with you wholeheartedly. I think we can find a way to accommodate both sides.

Senator MITCHELL. You don't think that is true?

Mr. BANKS. I don't think it necessarily has to be true. Let me give you an example.

Senator MITCHELL. I don't know whether it necessarily has to be true. Dr. Hernandez has been here and said, look, we have 10,000 permits and a lot of them are not subject to this kind of change. It doesn't make any sense to force us to do this every 5 years; in the majority of cases we could do it every 10. That seems like a fairly reasonable statement.

Mr. BANKS. In fact, Senator, there are more permits than that. But they haven't been reissued every 5 years. Some of them were issued 8 years ago and for the last few years have been in effect under force of law, with no extensions by EPA or the permitee. They are simply sitting there with old requirements. So it is simply not true to say EPA and the States are under this tremendous burden. These permits are not in fact rewritten every 5 years, but every 7 or 8 years.

Mr. HAUN. A symptom of a basic problem with the act, that that is in cases like that when one is operating under an expired permit, one really doesn't have any legal status. And when asked by management, for example, what is your situation, all you can

say is, well, we have been told we won't be prosecuted. To have a governmental process which in effect ends up at a dead end and the best you can hope for is a statement you won't be prosecuted is to us an unsatisfactory way of resolving the problem. The fact is there are permits going back to 1972 and before that have never been completely processed for one reason or another. And that I think is a source of great discomfort to a lot of people. That is one reason we come forward and say make them longer, maybe we will get a chance to do this.

Senator MITCHELL. Thank you, gentlemen, very much. This is very informative and interesting and I wish that there were more time to go over each subject matter like this. But we do appreciate your contribution and will be working with you on this.

The committee stands in recess.

[Whereupon, at 12:40 p.m., the subcommittee recessed, to reconvene subject to call of the Chair.]

[Statements submitted for the record and the bill S. 2652 follow:]

TESTIMONY OF
DR. JOHN W. HERNANDEZ, JR.
DEPUTY ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

JULY 21, 1982

Good Morning, Mr. Chairman and Members of the Subcommittee. I am pleased to supplement my opening remarks before the Committee with the following more detailed statement on the Clean Water Act and its reauthorization.

Over the past decade, the requirements of the Clean Water Act have been tested and refined, challenged and improved, analyzed and yet again revised. The purpose of this process has been to develop the most effective approach to water pollution control possible. The amendments of the last ten years have illustrated clearly that the Clean Water Act as we know it today is neither a static piece of legislation nor a "one-time perfect fix". Rather these ongoing developments and modifications reflect continuous efforts to address problems as they arise, discard impracticable or unworkable approaches, and adopt new strategies where old ones have proven ineffective or unnecessary. Today, in considering reauthorization of the Clean Water Act, we have the opportunity to continue this process, and to improve and build upon what has already been accomplished.

Our proposed legislative changes represent many months of careful thought and analysis on the part of EPA and the Administration. I believe that, if enacted, they will strengthen not

only the Agency's ability, but also that of State and local governments to address more effectively our Nation's water pollution problems. The fundamental philosophy behind these proposals is that the basic structure of the Clean Water Act is sound and that changes, where needed, should be designed to improve the implementation of the Act and its objectives.

In discussing the Clean Water Act, I want to make it absolutely clear that EPA is fully committed to the Act's fundamental objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. The legislative proposals which accompany the Administration's recommended reauthorization are intended to improve the Act's operation, not change its direction. We do not question the basic construct of the Act, nor has that ever been the issue. Its dual approach of technology and water quality based limitations form a technical base that has resulted in substantial progress, and this must continue. The institutional base for this progress is due directly to the working partnership between Federal, State, and local governments in addressing water pollution problems. This also must continue.

As with most maturing regulatory programs, however, improvements can be made in the Clean Water Act to enhance its implementation and operation. It is in this spirit that the Administration makes its recommendations. We have attempted to address what are obvious and widely recognized problems. We welcome debate

on our recommendations and pledge to work with and assist you in any way possible in making the Clean Water Act even better than it presently is.

I. Overview

In addressing the areas where we feel legislative changes are needed, it is important to discuss the background against which our proposals are offered. I would, therefore, like to provide a brief overview of the Act, its operation, and some of its basic statutory requirements. As part of that overview, I also want to discuss what has been accomplished thus far. We are all here today because we agree that more work remains to be done. But I feel strongly that we not let that common understanding obscure our considerable progress to date. In considering that progress to date we can better identify the shortcomings of the present approach and more clearly guide our future efforts on the basis of more than 10 years experience.

A. Clean Water Act Operation

Let me begin, then, by reviewing very briefly some key elements of the Clean Water Act's operation. Under the statute, EPA is required to establish water quality criteria, technology based effluent limitation guidelines, pretreatment standards, new source performance standards and a national permit program to regulate the discharge of pollutants. States are given the responsibility for developing water quality management programs setting water quality standards. The Act's technology based

limitations prescribe minimum standards of performance for municipal and industrial dischargers without regard to the quality of receiving waters. Water quality standards, by contrast, identify intended uses of particular water bodies and, on the basis of water quality criteria guidance developed by EPA, set forth the biological and chemical conditions necessary to sustain those uses. Generally, technology based standards set minimum control requirements which all dischargers are required to meet. Where those limitations are not adequate to achieve a particular State designated use, then State water quality based standards come into play and prescribe the additional controls necessary to meet the designated use.

Under the Act, direct dischargers of pollutants can be classified as either point or non-point sources. To deal with point sources, the Clean Water Act provides for the National Pollutant Discharge Elimination System (NPDES) which incorporates and applies effluent limitations in individual permits to both municipal and direct industrial dischargers. Under these permits, dischargers are subject to both technology-based treatment requirements and, where necessary to protect a designated use, controls based on water quality standards. Technology-based standards also deal, in part, with pretreatment of industrial wastes from facilities that discharge into municipal sewer systems instead of directly into a particular water body. These faciltites are referred to as "indirect dischargers" and to prevent certain

toxic pollutants in their waste effluent from passing through a a municipal treatment works insufficiently treated or from interfering with the operation of the treatment works, itself, technology based effluent "pretreatment" limitations are applied.

Technology-based does not mean that the Agency prescribes the technology that must be used. Rather, EPA reviews the various treatment techniques presently in use or available in each industrial sector to determine what limitations are achievable using available methods. Once EPA adopts effluent limitations for a particular industry, each company or plant is free to use any method it chooses to achieve these limitations. In practice, however, this range of choice is circumscribed by the availability of technology and its effectiveness in removing pollutants. These constraints are a major factor in rulemaking.

B. Statutory Background

To understand more clearly how this combined technology/water quality based approach works in practice, and also to provide an overall context in which to evaluate our present legislative proposals, let me relate some of the elements of this approach to specific technical requirements of the 1972 and 1977 amendment to the Act.

The 1972 Amendments to the Clean Water Act (P.L. 92-500) were when passed, and continue to be in their amended form, one of the most comprehensive environmental laws ever enacted. They established, as I just mentioned, a program to issue techno-

logy based effluent standards and a national permit program to implement those standards. As part of the program to issue standards, P.L. 92-500 required that effluent limitations be developed for municipal and industrial point sources of pollution and for toxic pollutants.

The Act directed EPA to establish a minimum level of technology based standards for publicly owned treatment works (POTWs) based on secondary treatment as defined by the Agency, and to establish best practicable technology currently available (BPT) standards for industrial categories. Both are uniform national standards and had a compliance date of July 1, 1977. Under the 1972 Amendments, EPA was also directed to establish a second level of control standards for industrial categories, based on best available technology economically achievable (BAT), to be complied with by July 1, 1983.

The 1972 Act's control strategy for toxic pollutants required the Agency to develop pollutant specific effluent standards to be applied to all industrial categories regardless of technological or economic achievability. These effluent standards for toxic pollutants were to be based on the nature of the pollutant, e.g., toxicity, rather than on the technologies available to treat those pollutants. The Act instructed EPA to, first, identify toxic pollutants and then, to issue effluent standards for those pollutants.

These initial provisions for the development of toxic pollutant standards proved to be cumbersome and time consuming.

During the five year period immediately following passage of the 1972 Amendments, the Agency only managed to produce effluent standards for six toxic pollutants. Because of the delay in promulgating toxic pollutant standards, EPA was sued by several citizen groups. As a result of the suit, a consent decree, commonly referred to as the NRDC Consent Decree, was entered in June of 1976.

In 1977, Congress passed mid-course corrections to P.L. 92-500 in the form of the Clean Water Act Amendments of 1977. The new Act codified many of the provisions of the 1976 NRDC Consent Decree and established three classes of pollutants for which technology based standards were to be developed. Those classes are conventional pollutants, toxic pollutants, and non-conventional pollutants. Conventional pollutants include those traditionally controlled by wastewater treatment systems, including biochemical oxygen demand (BOD), oil and grease, suspended solids, pH and fecal coliform. For industrial control of these traditional pollutants, Congress established a separate technology based control standard referred to as best conventional technology (BCT). Toxic pollutants include the 65 pollutants and categories of pollutants identified in the NRDC Consent Decree and section 307(a) of the Act. Further subcategorization of this number has brought the total to the 129 pollutants we often refer to today. Non-conventional pollutants is a catch-all category which includes pollutants not otherwise designated, such as phosphorus, nitrogen, and ammonia. Table 1 summarizes these pollutants.

TABLE 1. POLLUTANT CLASSES

CONVENTIONAL POLLUTANTS

- Biochemical Oxygen Demand
- Suspended Solids
- Oil and Grease
- pH
- Fecal Coliform

NON-CONVENTIONAL POLLUTANTS †

- Chemical Oxygen Demand
- Ammonia
- Total Organic Carbon
- Sulfides
- Nitrogen
- Phosphorus
- Pesticides *

TOXIC POLLUTANTS

- Heavy Metals
- Pesticides
- PCBs
- Phenols & Cresols
- Ethers
- Halogenated Aliphatics
- Phthalate Esters
- Nitrosamines
- Polycyclic Aromatic Hydrocarbons

† These are noted as "other pollutants" in the Act
* Pesticides not on the section 307(a) toxic pollutant list

New compliance deadlines were also established under the 1977 Amendments. BAT for toxic pollutants and BCT for conventional pollutants are currently required to be achieved by all industrial direct dischargers by July 1, 1984. BAT for nonconventional pollutants is to be achieved no later than July 1, 1987, with the possibility of environmental waivers under certain circumstances.

C. Progress to Date

The control measures adopted since the 1972 Act's passage have made substantial inroads in reducing pollutant loadings and improving water quality. In keeping with the mandate of the 1972 Federal Water Pollution Control Act, from 1972 to 1976 the Agency emphasized the control of such traditional pollutants as BOD and suspended solids using traditional wastewater treatment technologies.

The Agency prescribed the Best Practicable Technology (BPT) effluent limitations (or BPT equivalent standards) required by Congress to achieve industrial effluent removal of these pollutants. This set of standards was met by approximately 81 percent of the affected major industrial categories by the July 1, 1977 deadline, and 96 percent of industries have now installed or are in compliance with schedules to install appropriate treatment technology. The major industrial control achieved through these standards will reduce significantly the loadings of four key pollutants: biochemical oxygen demand by 69 percent; suspended solids by 80 percent; oil and grease by 71 percent; and dissolved solids by 52 percent.

In the pulp and paper industry the introduction of BPT dramatically decreased biochemical oxygen demand loadings by 85 percent.

The projected biochemical oxygen demand loading reductions resulting from BPT in major industries and from secondary treatment by POTWs is shown in Figure 1. The industries shown in this figure will achieve BOD loading reductions of 83 percent.

Monitoring data available shows that BOD reductions almost always result in reductions of toxic organic pollutants, although the reductions cannot be precisely correlated.

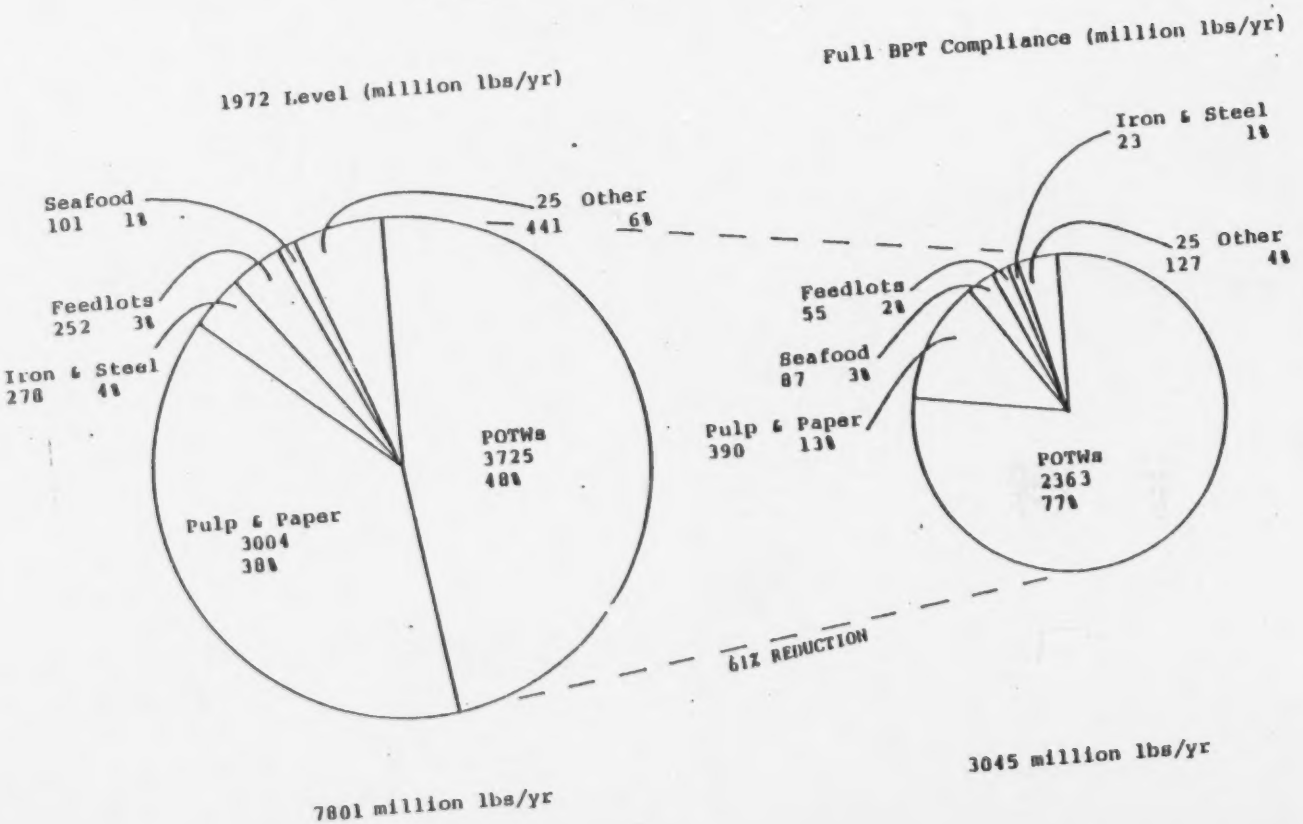
BPT has also resulted in the incidental removal of toxic heavy metals. Recent comparisons of estimated 1972 loadings of heavy metals to estimated BPT loadings from 26 industries shows reductions between 80 and 93 percent. Table 2 illustrates this in more detail.

TABLE 2. LOADINGS OF METALS FROM INDUSTRIES IN 26 CATEGORIES, THOUSANDS OF POUNDS PER YEAR

Metal	1972	BPT	Difference	Percent Reductions
Chromium	18,640	2,050	16,590	89
Lead	19,952	1,532	18,420	92
Copper	22,796	1,863	20,933	92
Cadmium	992	203	789	80
Nickel	22,046	3,362	18,684	85
Mercury	340	33	307	90
Zinc	108,798	7,848	100,950	93

Loading reductions are also occurring with the introduction of secondary treatment. By 1980, municipal sewage treatment plants were removing substantial amounts of conventional pollutants:

FIGURE 1. BOD_5 LOADINGS FROM MAJOR POINT SOURCES TO SURFACE WATERWAYS



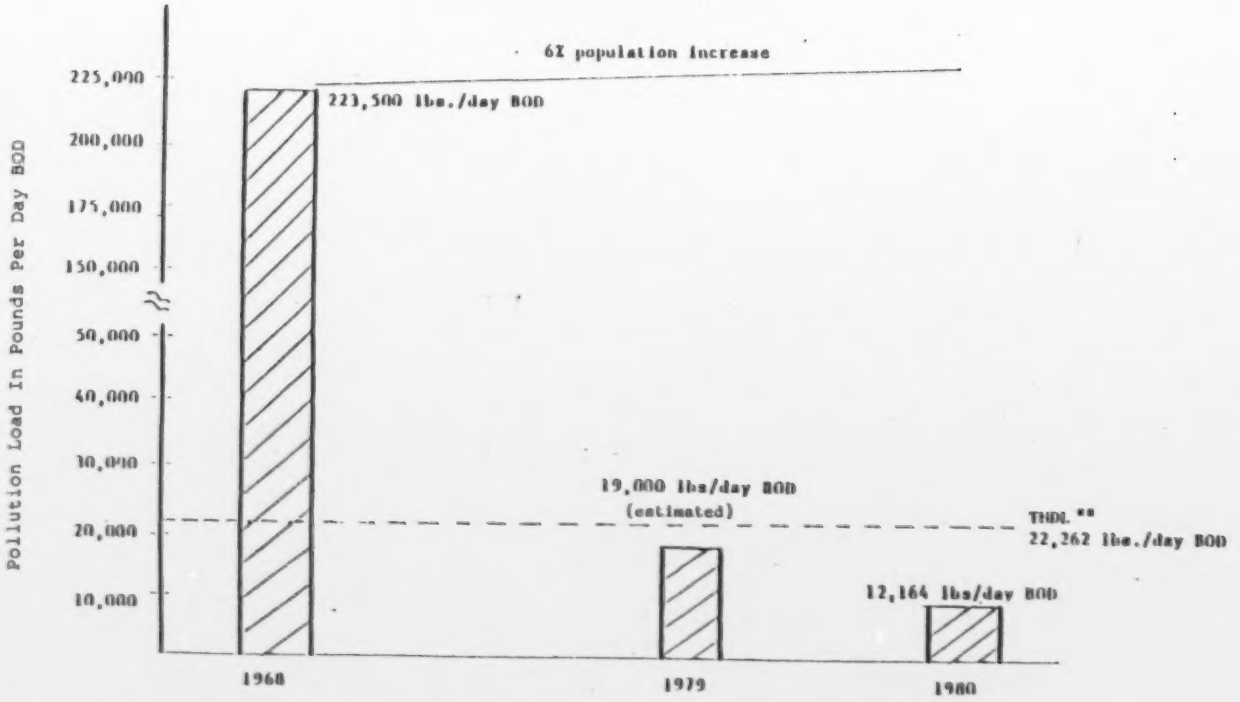
approximately 32 million pounds per day of BOD, and 38 million pounds of suspended solids. This represents an increase of 57 percent over 1973 levels, and is due in part to a significant increase in the number of POTWs achieving secondary treatment levels. One survey shows that compliance with secondary went from 40 percent in 1975 to over 75 percent in 1980.

Loading reductions provide one yardstick of regulatory effectiveness. More telling, however, are actual water quality success stories. Let me review a few of these with you.

In 1970, a Jefferson County water quality specialist measured a 65-percent depletion of dissolved oxygen levels in the Neches River below Beaumont near Port Arthur, Texas from dissolved oxygen levels measured upstream, and a 35-percent depletion in the river at Beaumont. Depletions of this magnitude are extremely unfavorable to fish and aquatic life. The fish in the Neches River, mainly largemouth bass, stayed above Beaumont, avoiding the 25-mile stretch between Beaumont and the tidal area at the mouth of Sabine Lake.

Between 1970 and 1975, the EPA awarded $10.5 million to construct secondary waste treatment plants and ancillary treatment facilities along the Neches River. Industry constructed pollution control facilities to provide clarification and aeration, systems to neutralize high or low pH levels, and separation devices to remove oil from the surface of the water. By 1976, the EPA had issued NPDES permits to all major industrial and municipal dischargers. Figure 2 indicates in graphic form the improvements

FIGURE 2. WATER QUALITY IMPROVEMENT
NECHES RIVER TIDAL AREA, TEXAS



Source: EPA, based on information from the State of Texas Department of Water Resources

** The Total Maximum Daily Load (TMDL) for this reach of the Neches River Tidal Area was established by the State of Texas Department of Water Resources and calculated based on modeling and field monitoring efforts. This was done in response to section 303(d)(1)(C) of the Clean Water Act.

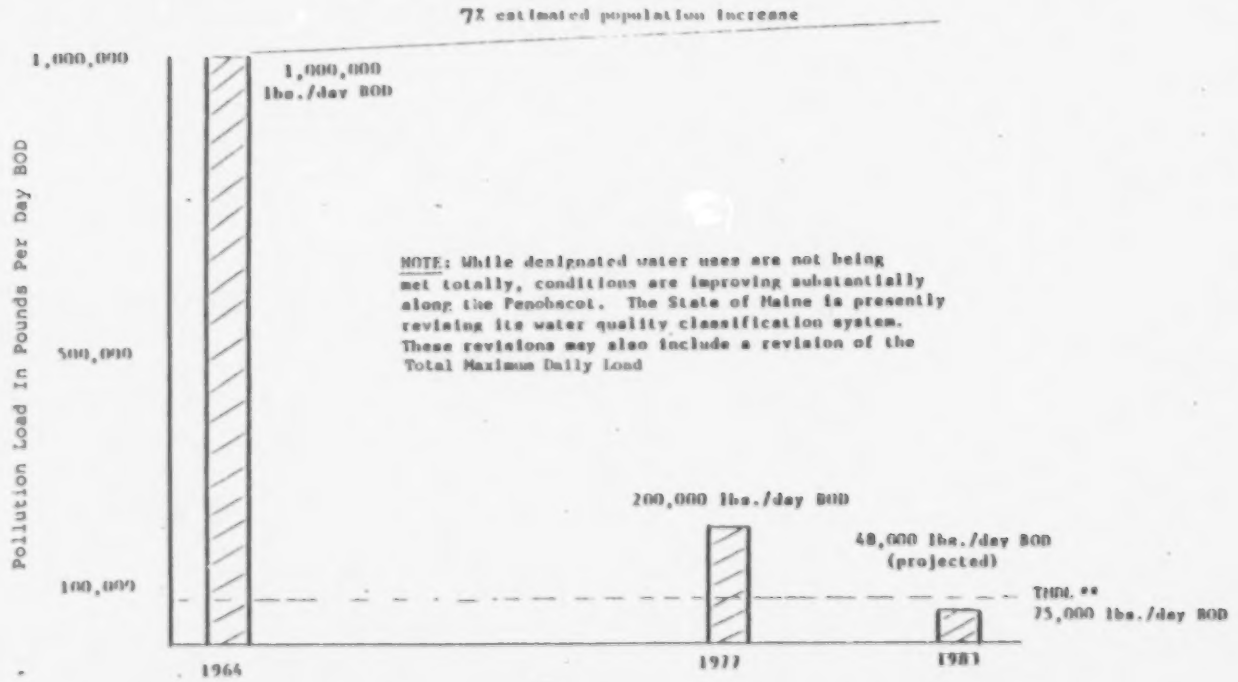
in the Neches River area as measured by reductions in biochemical oxygen demand loadings.

Shrimp moved up the Neches in quantities large enough to plug up industrial intakes, and commercial crabbers worked these waters for profit. Sportfishermen on Sabine Lake reported a marked improvement in their catches. During 1976, a tarpon was caught in Sabine Lake, the first tarpon caught in the lake in over 30 years.

The Penobscot river in Maine is another example of improved water quality. By the mid-1960's, the Penobscot was heavily degraded by untreated municipal wastes from ten communities and untreated industrial discharges from seven pulp and paper plants. In 1964, the load of BOD placed on the Penobscot was one million pounds per day. Dissolved oxygen levels were depressed to zero along parts of the river. In 1947, the last year that commercial fishing was allowed, 40 Atlantic salmon were caught in the Penobscot. No salmon were caught between 1957 and 1967.

Between 1969 and 1976, the pulp and paper mills along the Penobscot River spent $84.5 million to construct waste treatment facilities. Between 1968 and 1980, EPA awarded $16.9 million in construction grants to several communities along the Penobscot to construct secondary treatment plants, ancillary treatment facilities, and an interceptor system to divert untreated wastes to the City of Bangor treatment plant. The reduction in BOD loadings achieved through these controls is shown in Figure 3.

FIGURE 3. WATER QUALITY IMPROVEMENT
PENOBSCOT RIVER, MAINE


7% estimated population increase
1,000,000
500,000
100,000
Pollution Load In Pounds Per Day BOD
1,000,000 lbs./day BOD
NOTE: While designated water uses are not being met totally, conditions are improving substantially along the Penobscot. The State of Maine is presently revising its water quality classification system. These revisions may also include a revision of the Total Maximum Daily Load
200,000 lbs./day BOD
48,000 lbs./day BOD (projected)
TMDL **
75,000 lbs./day BOD
1964
1977
1983

Source: EPA, based on information from the State of Maine Department of Environmental Protection.

** The Total Maximum Daily Load (TMDL) for this reach of the Penobscot River was established by the State of Maine Department of Environmental Protection based on calculations and field monitoring. TMDLs are required by section 303(d)(1)(C) of the Clean Water Act.

The Penobscot Salmon Club near Bangor recorded 343 Atlantic Salmon in its record-books in 1978, and the Atlantic Sea-Run Salmon Commission estimated that 2,000 adult salmon moved upriver. The Commission currently plans to stock the Penobscot with 400,000 to 500,000 salmon per year.

The States report significant improvements in many of the Nation's waters, especially in levels of conventional pollutants. Many States note that water pollution control programs are reducing the discharge of conventional pollutants associated with municipal and industrial sources. Georgia indicates that 95 percent of its estimated 20,000 stream miles now meet the 1983 fishable/swimmable goal of the Act, Texas reports that 91 percent of its 16,100 miles meet these goals, and Virginia reports that 95 percent of its 27,240 stream miles meet these goals. In addition, recent EPA data show that there have been substantial improvements in the percent removal of biochemical oxygen demand and suspended solids from sewage treatment plant effluents over the past seven years, despite the rise in population and municipal flows.

II. Legislative Proposals

EPA's legislative proposals are offered in the context of the progress that has been achieved thus far. From the regulatory perspective of this Agency, we recognize the extent of the work that remains to be done. But we also recognize that improvements can be made. Greater efficiency can be realized and further progress assured by improving implementation of the Act.

In this portion of the testimony I will provide you with the facts which led EPA and the Administration to the decisions we made in developing our recommendations. First, I would like to provide a brief explanation of the process we went through in selecting the recommendations, including a discussion of options that were rejected.

One of the most important features of the Administration's legislative recommendations is the provision for a five-year reauthorization. I believe this will send a strong signal to both the public and industry alike that this Congress and this Administration are committed to sustained environmental progress. This will also provide needed certainty and stability for the regulated community. A five-year reauthorization will signify our determination to make the tough decisions now and then devote our resources and energies to making the program work.

Reauthorization of certain funding authorities is another clear need at this time. The Administration is requesting

five-year extensions of section 104(u)(1), 106(a) and 517. These funds will support the development of information on pollution prevention, reduction, and elimination through a program of research, investigation and demonstration (section 104(u)(1)); grants for State and interstate agency pollution control programs (section 106(a)); and the general implementation of the Act (section 517). In addition, we have clarified the reference to section 304 under section 517 to make it clear that only section 304(k) should be precluded from funding under 517 because it contains its own authorization provision.

Beyond the extension and reauthorization request, the proposed modifications embody several themes. The first such theme centers on the need for more time to effectively implement certain portions of the law. Extensions of certain statutory promulgation deadlines, modification of industrial compliance deadlines to conform with the actual promulgation of BAT and BCT effluent guidelines, and extension of the application period for publicly owned treatment works (POTWs) to secure additional time for construction and installation of control equipment, all reflect reality - facts and circumstances that simply cannot be overlooked. Modification of deadlines will provide certainty to the regulated public and assure orderly compliance.

Increased administrative efficiency is the goal of other proposed modifications. Many industries and municipal dischargers have met their discharge limits and maintain an excellent compliance record. In view of this and the tremendous permit reissuance

workload at the Federal and State level, it is reasonable to afford these dischargers permits of up to ten years rather than the existing five year period. A ten year permit term is also more consistent with corporate planning for capital investments. EPA is also asking that administrative civil penalties be provided for under the Act, and that existing criminal sanction provisions be strengthened. These modifications will provide for a stronger and more efficient enforcement program and bring the Clean Water Act in line with other existing environmental statutes.

Greater emphasis on the role of States and local governments is the third theme of these amendments. An effective working partnership with State and local governments is essential to the successful implementation of the Clean Water Act. These amendments allow those States which have not yet assumed authority for an entire permit program to administer portions of it while moving toward future assumption of the entire responsibility. In addition, greater State and local responsibility for the pretreatment program is provided. This latter proposal is based on the proven ability of many State and local agencies to handle their water pollution problems. Effective local ordinances exist in many areas. This proposal recognizes the principle that those closest to the problem understand it better and can best contribute to its solution.

A final theme reflected in these proposed amendments is the need for clarification of the present statute. These proposals relate to the regulation of dams, munitions, and federal facilities. We believe that recent judicial decisions on the regulation of dams and munitions need to be corrected. In addition, expansion

of federal facility exemption provisions is requested to provide the Department of Defense with needed flexibility to respond to national emergencies.

Development of all these recommendations was achieved through a comprehensive evaluation of the effectiveness of our national strategy for water pollution control. Many of the areas of concern noted in that study have been addressed in the Administration's proposal including deadline extensions, longer permit life, and pretreatment changes. Vice President Bush's Regulatory Reform Task Force has also addressed Clean Water Act issues. As a result of the Task Force's work, we have been better able to identify which programs could be improved through regulatory reform and which required legislative change.

Over the last year, I, Eric Eidsness, and members of EPA's professional staff have met and discussed the Clean Water Act with a wide range of interest groups. These meetings included representatives of States, local governments, business, public interest and environmental groups and resulted in many excellent suggestions that are reflected in the proposed amendments.

Before I explain in some detail the rationale for each amendment, allow me to review a few of the options not included. Certain changes to the implementation of the Clean Water Act can be handled through regulatory modification and, therefore, do not require legislative amendment. Some groups, for example, recommended that the water quality planning and standards program

would benefit from legislative consolidation. After study, EPA determined that the objectives of this consolidation could be achieved without statutory change.

Perhaps the issue that has been discussed most widely is the concept of modifications of BAT and BCT technology-based controls. As I testified in February, EPA strongly supports the need to identify an appropriate method to avoid "treatment for treatment's sake". However, the Agency did not recommend that Congress consider a BAT environmental modification program at this time for several reasons. Chief among them is the EPA's agreement with this Committee's position that the Act is fundamentally sound and that modifications should not be made unless compelling evidence exists that the current program is not working and there is substantial agreement on a modified approach. Our chief roadblock is that with many of the BAT guidelines not yet in place, it is difficult to determine the extent and type of modification that eventually may be warranted. Later in our testimony we will describe the schedule for the issuance of these guidelines. These guidelines will be based, in part, on the costs of compliance, a key parameter in assessing the value of a BAT environmental modification program. The Agency could neither measure the need for change or achieve substantial agreement on how a BAT environmental modification provision could be constructed at this time. It is for these reasons that a provision for such a modification was not put forth by the Administration.

The Agency conceptually reviewed two BAT environmental modification options in detail. The first option would have provided for modifications of BAT toxic controls where water quality objectives are currently being achieved (non-predictive option). The second option involved some level of scientific prediction in that BAT modifications would be allowed if the discharger could demonstrate that although water quality objectives were not yet being met, they could be achieved without resorting to full BAT controls. This would mean that some intermediate level of controls between existing in-place treatment technologies and those necessary to meet BAT limitations could achieve water quality objectives (Predictive Option).

Suboptions of both the predictive and non-predictive modification options included the definition of water quality objectives in terms of water quality criteria, biological integrity or the attainment of designated uses.

The Agency reviewed both of these options and the suboptions in detail. It was clear that the predictive option involved the collection, projection, and analysis of more scientific information than the non-predictive option. The discharger and permitting authority would need to assess whose discharge and which pollutants were responsible for impaired aquatic uses. Thus, the predictive option would necessitate toxic water quality modelling techniques for wasteload allocations to measure the interrelationship of many different sources and pollutants in complex waterbodies. Further scientific and technical information is necessary to

achieve this. The Agency and various private interests are working on improving these methods which include mathematical models and biological assessment techniques.

In contrast, the non-predictive modification program would be far less complex. In this case, if a stream segment's environmental objectives, as measured by water quality criteria, biological integrity, and/or use-attainment, are being achieved through in-place treatment, a BAT modification would be granted to all dischargers on the segment. This is a conceptually more attractive approach in its simplicity, but it too involves scientific assessments and the problem of assessing downstream toxic effects. Moreover, it would be of limited value because it would not address all the "treatment for treatment's sake" situations that the predictive option could.

In summary, the predictive option is more difficult to implement while the non-predictive option, although not as scientifically difficult, may not achieve the full objectives of an environmental modification program. Good information on current stream conditions and the impact of BAT rules is yet to be developed and it is needed for both types of exemption modification options.

In the aggregate, the costs or environmental merits of a modification program cannot be fully assessed at this time. In addition, the Agency has only recently promulgated its third BAT guideline. Since final BAT limitations have yet to be promulgated for another 26 industries, it is unclear how many industrial plants

would benefit from BAT modifications versus the costs incurred by both the private and public sector in developing data and processing applications.

Since the value of a modification program should be judged on the basis of how much unnecessary treatment can be avoided, the Agency could not make a judgement on the value of a BAT modification at this time. As the regulatory process progresses, and waste load allocation and biological assessment techniques are improved, the Agency will continue to study alternative BAT modification options and work toward developing a reasonable approach as soon as possible.

A. Additional Time

Let me now turn to those proposed amendments which recogize the need for time-extensions in the development of guidelines, compliance with those guidelines and permit implementation. This applies to application deadlines for publicly owned treatment works (POTWs) to secure additional time to meet secondary treatment levels, promulgation deadlines for issuance of BAT/BCT guidelines, time for industrial compliance with these guidelines, and the applicability of new source performance standards.

I. POTW Application Deadlines

As noted above, the Clean Water Act of 1972 required that all POTWs meet secondary treatment standards no later than July 1, 1977. In 1977, however, Congress provided an extension of that deadline to July 1, 1983 for those POTWs which failed to meet the original date due either to lack of federal funds or construction delays in building the necessary treatment facilities. Under the 1977 amendments to the Clean Water Act, POTWs were given 180 days from the Act's passage to apply for the extension.

In its general reauthorization and reform of the Construction Grants Program in 1981, Congress provided an additional 5-year extension from the 1983 secondary treatment deadline to no later than July 1, 1988. The effect of this action was that POTWs which had submitted applications within the 180 day period following passage of the 1977 amendments and received extensions to 1983 were eligible to apply for the new extension, but all other POTWs were not.

We agree that POTWs with extensions to 1983 certainly should be eligible to apply for the 1988 deadline. But we also believe that many other facilities are now facing the same problems as the early POTW applicants, and that they also should have an opportunity to apply. Section 3 of our legislative submission, therefore, proposes to extend the previous application deadline to allow POTWs up to one year from the passage of these amendments to submit an extension application.

2. Promulgation of BAT/BCT Guidelines

The 1977 amendments to the Act required EPA to promulgate national BAT and BCT guidelines. Due to the tremendous amount of work involved in promulgating these guidelines, these target-dates proved to be far too ambitious and the Agency simply has been unable to meet them. Individual new source performance standards and categorical pretreatment standards are generally issued concurrently with their BAT/BCT counterparts and, thus, their promulgation deadlines remain unmet as well.

These deadlines were set in good faith with the honest expectation that they could be achieved. All can agree, however, that the real scope of the task involved was not appreciated and that, in fact, these target-dates have proved to be unrealistic given the massive amount of preparation and groundwork that was not anticipated at the time the dates were set.

Drawing on the experience we have accumulated and the substantial amount of work that has been accomplished, we are

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recommending that these dates be modified to reflect what we have learned about the task and where we really are. The Agency is presently committed to promulgating the major industrial BAT/BCT guidelines by no later than July 1, 1984. This is an optimistic and ambitious goal but we believe that it can be met. We, therefore, propose that the final guideline promulgation deadline be set at this date.

This recommendation is based on hard calculations and a determination to reduce the necessary guideline development time to a bare minimum. EPA means to meet this deadline. In explaining why this is possible now and yet was not before, let me take a step back and review with you where we started and how far we have come.

Under the Clean Water Act the Agency was to determine the "best available technology economically achievable" (BAT) by considering such factors as the age of industrial facilities, the manufacturing processes employed, energy impacts, non-water quality environmental impacts, and the cost of pollution control. Because of limited Agency knowledge about the nature of the pollutants to be controlled, the validity of analytical methods, or wastewater treatment technology performance, it was necessary to build an extremely large data collection and analysis program from a data-base which was limited primarily to information on traditional pollutants. The exhaustive data collection and analysis program covered engineering data, and chemical analyses of industrial influent and effluent from a variety of treatment systems.

Not only were the pollutants generally not well understood, but EPA laboratories and consultants actually had to develop appropriate quantitative and qualitative analytical methods for their detection and measurement prior to plant sampling. Most of the organic substances required sophisticated and complex analytical techniques not widely utilized in previous efforts to develop water pollution control regulations. During the late-1970s, the Agency utilized almost 100 percent of its national analytical laboratory capacity to perform the required sophisticated analyses.

The lack of knowledge of the treatability of the toxics required parallel studies of treatment mechanisms while we were still learning proper detection methods. Information on industrial wastewater treatment technologies, particularly treatment technologies for low concentration organic substances was not readily available. There was a scarcity of performance data for the removal of pollutants in question. This paucity of industrial wastewater treatment data compounded the difficulty of developing viable regulatory options.

In order to develop limitations that corresponded to the actual operations in particular facilities, the Agency divided industrial categories into segments to reflect different production processes in each industry.

For each category, engineering, economic, and environmental analyses are necessary to develop realistic, defensible guidelines that represent the best available technology economically achievable. The engineering analyses entail complex studies to determine the

wastewater characteristics and treatment alternatives for each of the industrial categories and subcategories. These studies are based first on an analysis of typical industrial aqueous influents and effluents for each subcategory. Using this information, significant conventional, nonconventional, and toxic pollutants must be identified in qualitative and quantitative terms. Once identified, an assessment of the entire range of available measures to control and treat them must be undertaken. Finally, technical considerations are translated into capital, operating, and maintenance costs of the alternative treatment technologies which are then compared to the effluent reduction benefits to be achieved from their application.

Once we know what pollutants are involved and the treatment processes that are available, it becomes necessary, as Congress required, to determine what is "economically achievable." To make this determination, the Agency collects detailed financial and economic information about the regulated industry. The economic data base includes types of firms and plants, financial profiles, production costs, prices and demand characteristics. This information is used to estimate changes in prices, profitability, capacity growth, production and employment reductions, and plant closings.

Finally, the Agency conducts environmental assessments on BAT options to determine the benefit of different degrees of treatment. These assessments are conducted by comparing projected instream concentrations of pollutants under different treatment alternatives with EPA criteria and/or appropriate state standards.

These modelled results provide the Agency with a rough measure of environmental results which may be achieved under different treatment options.

The Iron and Steel Effluent guidelines promulgated on May 27, 1982, provide a good example of how this process works. The Agency first divided the iron and steel industry into 12 subcategories which were further divided into 52 segments, reflecting the different production processes in that industry, including: coke production, ironmaking, steelmaking, and the various processes necessary to finish the products into pipes, sheets, and other products. Then the Agency sampled the influent and effluent of over 100 plants. This involved screening the 129 priority pollutants, and after identifying 41 of these at detectable limits, further analyzing them for detailed concentration and loading information. Next, it was determined that several different wastewater systems could be used in each subcategory, and each had to be investigated to determine its removal efficiency. In addition, the Agency had to determine whether each system was "economically achievable" from a financial and community impact perspective. To do this, EPA considered the increased compliance costs associated not only with this regulation but also other major environmental regulations and determined that changes in prices, market share, employment and production would be less than 0.6 percent. Thus, the Agency concluded that the selected option was "economically achievable." Finally, our environmental analysis indicated that

projected violations of State water quality standards were greatly reduced under BAT as compared to BPT.

To date, we have assessed 21 separate industrial categories which are presently subdivided into over 350 subcategories. To provide an example of what this means in practice, Table 3 illustrates the subcategories of the three BAT guidelines that have been promulgated in final form. Quite simply, we underestimated the time for engineering economic and environmental analyses necessary for developing realistic guidelines. We have now nearly completed the data collection efforts essential to developing BAT guidelines. The analytical methods which we had to develop in the early stages of the program are now working well.

It is because of this work and the expertise that has been developed in the process that we now feel we can confidently assess the amount of work that remains and how long it will take. The majority of the resource and time intensive work which has been responsible for the lag in the guidelines development process is now complete. Twelve guidelines have already been proposed (three of which have been fully promulgated) and the remainder of the industrial guidelines will be proposed soon and will be promulgated by 1984. EPA's guideline proposal/promulgation schedule is detailed in Table 4.

TABLE 3. SUBCATEGORIES OF PROMULGATED REGULATIONS

INDUSTRY	SUBCATEGORIES
Inorganic (Phase I) Chemicals	aluminum flouride (1-4) chlor-alkali mercury cell process (2-4,6) chlor-alkali diaphragm cell (1,2,4,5,6) chrome pigments (1-4,6) copper sulfate (1-6) hydrogen cyanide (1-4,6) nickel sulfate (1-6) sodium bisulfate (1-4,6) sodium dichromate (2-4,6) titanium dioxide-chloride (1-4,6) titanium dioxide-ilmenate (1-4,6) titanium dioxide-sulfate (1-4,6)
Timber Processing	Barking (1,4,5,6) Veneer (1,2,4-6) Plywood (1,2,4-6) Dry Process Hardboard (1,2,4-6) Wet Process Hardboard (1,3,4-6) Wood Processing Waterborne or Nonpressure (1,2,4-6) Wood Preserving-Steam (1,4-6) Wood Processing-Boulton Wet Storage (1,2,4-6) Log Washing (1,2,4-6) Sawmills and Planning Mills (1,2,4-6) Finishing (1,2,4-6) Particleboard Manufacturing (1,2,4-6) Insulation Board (1,3,4-6) Wood Furniture and Fixture Production without Water Wash Spray Booth(s) or without Laundry Facilities (1,2,4-6) Wood Furniture and Fixture Production with Water Wash Spray Booth(s) or with Laundry Facilities (1,2,4-6)
Iron and Steel	By Product Cokemaking (1-6) Sintering (1-6) Ironmaking (1-6) Steelmaking (1-6) Vacuum Degassing (1-6) Continuous Casting (1-6) Hot Forming (1-6) Salt Bath Descaling (1-6) Acid Pickling (1-6) Cold Forming (1-6) Alkaline Cleaning (1-6) Hot Coating (1-6)

Key: (1) BPT, (2) BAT, (3) BCT, (4) NSPS, (5) PSES, (6) PSNS

TABLE 4. EFFLUENT STANDARDS AND GUIDELINES
PROPOSAL AND PROMULGATION SCHEDULE***

Industrial Categories	Proposal Date*	Promulgation Date*
Aluminum Forming	11/82	7/83
Battery Manufacturing	10/82	6/83
Coal Mining	12/80**	9/82
Coil Coating (Phase I)	12/80**	11/82
Copper Forming	10/82	7/83
Electric & Electronic Components (Phase I)	8/82	3/83
Foundries	10/82	8/83
Leather Tanning & Finishing	6/79**	11/82
Metal Finishing	8/82	6/83
Nonferrous Metals (Phase I)	1/83	1/84
Ore Mining	5/82**	11/82
Organic Chemicals and Plastics & Synthetic Materials	2/83	3/84
Pesticides	11/82	12/83
Petroleum Refining	11/79**	9/82
Pharmaceuticals	11/82	9/83
Porcelain Enameling	1/81**	11/82
Pulp & Paper	12/80**	10/82
Steam Electric	10/80**	11/82
Textiles Mills	10/79**	8/82
Adhesives Sealants	2/83	11/83
Coil Coating (Can Making)	1/83	10/83
Electric & Electronic Components (Phase II)	2/83	11/83
Inorganic Chemicals (Phase II)	9/83	6/84
Nonferrous Metals (Phase II)	9/83	6/84
Nonferrous Metals Forming	9/83	6/84
Plastics Molding & Forming	10/83	6/84

* Signature date
** Completed
*** This schedule is the most ambitious schedule which the Administrator could propose and still promulgate sound and legally defensible regulations. In accordance with the May 7, 1982, Court Order, this schedule contains no additional time:

- For considering changes in cost due to changes in regulations under the Resource Conservation and Recovery Act;
- For preparing a Regulatory Impact Analysis or review by the Office of Management and Budget under Executive Order 12291.

3. BAT/BCT Compliance Deadlines

Section 2 of the Administration's proposed amendments would extend the current deadline for industrial compliance with BAT and BCT effluent guidelines from July 1, 1984 to no later than July 1, 1988. This extension would parallel the necessary modification of Agency BAT/BCT promulgation dates and correspond as well to the extended municipal secondary treatment compliance date of 1988 set by Congress in last year's amendments to the Construction Grants Program.

In setting the original industrial compliance dates in the 1977 amendments to the Clean Water Act, Congress recognized that industry needs a reasonable amount of time after promulgation of a guideline to construct the necessary treatment facilities and come into compliance with the standard. Industrial facilities were initially provided with up to four years in which to meet a particular technology based guideline. Because of the difficulties I just discussed in getting guidelines out, however, this compliance period has been drastically reduced. We, therefore, strongly recommend that it be modified to comport with the original intent of Congress.

In urging this extension, let me emphasize the actual legislative language proposed: "no later than July 1, 1988." EPA has no intention of sitting back until January 1, 1988 and then determining which facilities will be able to meet the deadline in the remaining six months of the extension. Where an industrial

facility can reasonably come into compliance before 1988, it will be required to do so.

We are also proposing a related extension involving section 301(k) of the current Act. Under the 1977 amendments, Congress provided for a three year compliance extension to July 1, 1987 from toxic BAT standards for facilities which can demonstrate either that they can adopt "innovative technologies" to achieve effluent limitations equivalent to BAT at considerably less cost or achieve significantly greater reduction than would otherwise be required. This extension provides industrial facilities with the time to develop, test, and implement such alternative control measures. Given the delays in promulgating guidelines, the Agency believes that the Section 301(k) deadline extensions for innovative technologies should be extended in line with the proposed July 1, 1988 compliance deadline.

In addition, we believe that the scope of the extended deadline for innovative technologies should be broadened to include the treatment of conventional and nonconventional pollutants. The opportunity to draw upon new technologies or processes to reduce costs is to everyone's benefit and we should continue to encourage it.

4. New Source Performance Standards

Presently, industrial facilities are subject to new source performance standards under the Act if construction begins after publication of a proposed new source rule. EPA's rules generally provide that the source is not subject to the new source standards

if final rules are issued more than 180 days after proposal. However, one court has already struck down that rule for the coal mining industry, and the rule is again under attack in two courts. If EPA does not prevail, a new facility will be subject to new source performance standards upon proposal of that standard, even though the facility will not know with certainty what the ultimate requirements will be until the final new source standard is promulgated. Our experience has demonstrated that as a result of public comment and reassessment, changes in the regulations do occur between proposal and final promulgation. In practice, this means that planning, design, and construction are either delayed pending promulgation of a final rule, or continue subject to the considerable and potentially very expensive risk that the ultimate requirements may be changed forcing additional design changes and construction modification.

As you can see from the guidelines proposal/promulgation schedule in Table 4, promulgation of effluent guidelines normaliy exceeds the four month period that Congress originally envisioned would exist between proposal and promulgation. It is within the period between proposal and promulgation that the Agency must solicit, analyze and respond to public comments and prepare the extensive support documents that accompany rules. This is not as simple as it sounds.

Careful analysis of each comment received by the Agency is essential to providing legally sound and defensible regulations. Each comment is recorded and incorporated into the administrative

record; reviewed and thoroughly analyzed; and finally, must be responded to by the Agency. To accomplish this task, each comment must be considered in light of all the other comments that are received; and involves expert reviews by the engineer, the statistician, the economist, and the lawyer prior to the Agency's final response. Although the degree of the comments may vary, commenters have frequently challenged the validity and statistical analyses of the data and argued that EPA has failed to subcategorize the industry properly. Response by the Agency to these types of comments often requires additional data collection, technical and/or economic analysis, and possibly another comment period in order to provide an adequate evaluation for the final regulatory decision.

The Iron and Steel industry regulations which include NSPS provides an example of what this may entail in practice. Two hundred comments representing 780 pages of text were received on these regulations. The Agency's efforts to respond to these comments took a total of 6.25 staff workyears. To provide a more specific example of why so much time was involved, one comment received by the Agency argued that the "merchant coke operation" plants that were included within the described subcategory should not be subject to the proposed regulation at all, or, in the alternative, should be subject to less stringent standards. In order to adequately respond to this comment, the Agency collected additional data; developed separate cost models; conducted a separate economic analysis for the plants in this

subcategory; and subsequently established a separate subdivision within the subcategory for those specific plants. This entire effort alone took 4 months.

The regulation was promulgated in May, 1982, sixteen months after the regulation's proposal. It is not our intention to take this long in the future. Nonetheless, a responsible review of public comments does take time. Even a streamlined review process will not approach the four month turn-around period envisioned in the Act.

Moreover, the promulgated regulation may not be a mirror image of the proposed regulation. Indeed, if the two were equivalent the value of public comment on the Agency's rulemaking proposals would be subject to question.

With these two points in mind the Agency proposes to amend the current definition of new sources for those regulations promulgated after the amended Act's passage. The definition of new sources will be modified from those sources constructed "after the publication of proposed regulation" to sources constructed "after the publication of final regulation". This will allow the Agency to maintain its flexibility in responding to public comments on its proposed regulations. More important, facilities under construction will not face a "moving target" as to their wastewater treatment requirements. The proposed amendment removes a degree of uncertainty which now faces industrial firms interested in the construction of new facilities or new process lines in existing facilities.

5. Permit Term Extension

Once an effluent limitation guideline is issued in final form, it is applied to a particular industrial facility by permit through the National Pollutant Discharge Elimination System (NPDES). We are proposing that the current maximum 5-year term for an NPDES permit be extended to a maximum of 10 years. Among all the groups who have commented on reauthorization issues, the permit term extension has been one of the most widely supported Administration reforms. A 10-year permit would provide more certainty to industries and municipalities to plan for wastewater treatment requirements and would allow more efficient and effective use of current levels of permitting resources without loss of environmental protection.

To date EPA and the States have issued approximately 65,000 "first round" permits (issued between 1972 and 1976). The "second round" of permitting, designed to incorporate BAT/BCT treatment requirements has been delayed by the absence of promulgated guidelines. Despite these delays, approximately 11,600 5-year industrial permits have been issued, many of which can be considered "second round" permits. Presently 30,400 permits have expired and need to be reissued, and over the next 3 years, the remainder of the "first round" permits will expire. In addition to the burden of reissuance, EPA also receives about 2,000 applications for new permits each year. Tables 5 and 6 show the status of the NPDES permits program and reflect the tremendous backlog facing EPA and the States.

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TABLE 5. DISTRIBUTION OF NPDES PERMITS BY PERMITTING AUTHORITY

EPA Responsibility: 17,000 Permits	Current	Expired
Municipal Major Permits	1,000	200
Industrial Major Permits	500	1,100
Municipal Minor Permits	800	1,900
Industrial Minor Permits	5,000	6,500
	7,300	9,700

State Responsibility: 48,000 Permits	Current	Expired
Municipal Major Permits	1,900	700
Industrial Major Permits	900	1,700
Municipal Minor Permits	5,700	3,200
Industrial Minor Permits	18,800	15,100
	27,300	20,700

TABLE 6. STATUS OF NPDES PERMIT PROGRAM

Total Issued	Major	Minor
Municipal	3,800	11,600
Industrial	4,200	45,400
	8,000	57,000

Status of Permits Issued	Current	Expired
Municipal Major Permits	2,900	900
Industrial Major Permits	1,400	2,800
Municipal Minor Permits	6,500	5,100
Industrial Minor Permits	23,800	21,600
	34,600	30,400

The current 5-year permit life theoretically requires permitting agencies to reissue an average of 20 percent of their permits each year. In practice this has not been possible due to large permitting workloads and delays in the promulgation of effluent guidelines. As a result, many permits have been extended under the Administrative Procedures Act rather than reissued or have been reissued as short-term permits. With 5-year permits this backlog can never be reduced at current permit issuing levels. Before the permitting authority can complete permit issuance of existing expired permits, the reissued 5 year permits will begin expiring once again. Extending the permit term to 10 years will reduce the ongoing annual burden of reissuance and allow the backlog to be addressed.

To provide a clear understanding of what this proposal means, let me explain the operation of the present permit approach. A five-year NPDES permit usually consists of four parts. Part I contains the limitations on the amount and concentration of specific substances that can be discharged and the requirements for self-monitoring. Part II contains the schedule for compliance which may include construction schedules or timetables for report submissions. These schedules bear no relation to the length of the permit term itself. Depending on the actual situation of the permittee, the requirements of Part II may be met well in advance of a permit's expiraton. Thus, extending the potential permit life to 10 years clearly does not mean that existing compliance schedules will also be extended. Part II of the permit also

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contains the general requirements applicable to all permittees such as penalties for permit violations and procedures by which permits may be modified. Part III contains any special requirements that are not covered in the numerical limitations in Part I, including monitoring and recordkeeping requirements. For example, requirements to conduct effluent toxicity studies are found in Part III. Part IV contains other requirements, such as Best Management Practices (BMP) for the minimization of spills and other non-routine discharges from ancillary activities. This explanation of a permit shows why extending the permit term will not effect the content or the purpose of the permit system.

Some groups have expressed concern that an extended permit life may mean less control or that the permitting agency may not have the authority to review and modify the permit conditions before the end of a permit term. In response to this, let me emphasize the proposed ten-year permit will set out the same conditions as a five-year permit. In addition, the ten-year permit we are suggesting will not affect the statutory compliance dates for best available technology (BAT) permits. Moreover, it is our intent that either EPA or the NPDES State be able to reopen and modify 10-year permits to reflect new BAT, water quality, and other pollutant limitations. Thus, the ten year permit provides the same degree of control as the current five-year permit.

Another effort in this area is the Agency's "second round" permitting policy to ensure that, as permits are reissued and the backlog addressed, the process will be conducted in as efficient

a manner as possible. While not directly related to a specific legislative proposal, I believe that a brief explanation of this approach will provide a clearer idea of how the Agency intends to deal with the current permitting problem.

The "second round" policy establishes five priority areas for NPDES permitting. The first priority is to issue permits in areas where designated receiving water use-impairment problems have been identified; the second concerns those facilities for which BAT guidelines have been promulgated; the third is where designated receiving water use-impairment problems are suspected; the fourth relates to industrial categories for which guidelines are not scheduled and for which existing permit limitations do not result in sufficient treatment; and the final priority is to reissue permits for those facilities for which modified permit limitations are not required.

This system of prioritization will ensure that those dischargers most responsible for use-impairment conditions will be abated first. It will also ensure that permits are issued through an orderly and predictable process and that our waterways are cleaned up in the most efficient way possible.

B. Administrative Efficiency

The proposals I have discussed thus far would give EPA and the States needed time and flexibility to accomplish certain objectives. However, added time alone is not enough. We need to make better use of the time. For this reason we have developed some proposals that will greatly improve administrative efficiency.

1. Administrative Civil Penalties

Section 8 of the Administration's proposed legislation allows the Administrator to assess civil penalties for clear and well documented violations of the Act. Penalties of up to $10,000 per day of violation could be assessed up to a total maximum penalty of $75,000. The bill specifies certain factors which must be considered by the Administrator when the penalty is assessed. The amendment also provides for notice and an opportunity for an informal hearing on the penalty assessment. If not paid, assessed penalties would be subject to collection actions brought by the Attorney General in United States District Court. Further, a violator dissatisfied with the final assessment by the Administrator would be able to seek a review of that assessment in United States District Court within thirty days of the assessment. The court review would be appellate in nature and not a de novo trial proceeding.

This section would provide the Agency with a needed enforcement tool. Presently the Administrator may issue administrative orders for certain violations of the Act or may pursue a judicial civil action. The provisions of these administrative orders vary depending on the conditions causing a particular violation. The orders usually specify the requirements which will lead to

compliance for that particular source. For example, the order may mandate the use of certain equipment or may call for studies to determine what types of equipment may be most appropriate. If the administrative order is ignored by the violator, EPA must go to Court to enforce the provisions of the order. In FY 81, over 550 administrative orders were issued under section 309 of the Clean Water Act.

A judicial civil action is the other enforcement option available to enforce the provisions of the Clean Water Act. Thirty-six Clean Water Act cases were referred by EPA to the Department of Justice in fiscal year 1981 and 17 during the first half of fiscal year 1982. Currently, civil penalties can only be assessed through such a court proceeding. Because of the complex procedural steps involved, a judicial action generally takes longer to complete than an administrative proceeding.

A judicial action begins with the filing of a complaint and service of summons on the defendant. Time is allowed for the defendant to answer the complaint. However, before answering, the defendant may file various motions, each of which may require a separate hearing before the Court and require further time. After the defendant answers, the discovery process begins. During discovery, each party can explore the other's evidence through the use of interrogatories, depositions and requests for the production of documents. Each of these discovery processes takes additional time and may generate disputes between the parties which can require resolution by the Court after another hearing.

After all the evidence is presented at trial, a further period of time will be necessary for the Court to reach its decision and to write the resulting order. Appeals to higher Courts may follow. Even if no appeal results, the need still exists to monitor the defendant's performance with regard to the Court's order. In the event of the defendant's non-compliance, another Court proceeding, a contempt proceeding, may be necessary to enforce the order.

This whole judicial process must be viewed against the backdrop of the District Court docket. Each hearing on a motion and the trial must be scheduled to fit into the Court's calendar. It should be recognized that environmental cases would probably represent only a small percentage of the Court's workload.

By contrast, the administrative procedure provided by the Administration's proposal provides a simpler and quicker means of assessing penalties. The need to go to federal court initially to seek the assessment of the penalty has been eliminated since the bill gives the Administrator the power to assess these penalties. The Courts may still be involved for collection purposes and for purposes of hearing appeals, however, the assessment procedure itself would be much quicker in an administrative scheme.

Administratively assessed civil penalties for the violation of an environmental statute is certainly not a new concept. EPA currently assesses penalties administratively under a number of Acts, including TSCA, FIFRA, RCRA and CAA. Additionally, the

Coast Guard assesses civil penalties under section 311 of the Clean Water Act pursuant to a scheme of informal hearings before hearing officers. By providing authority for administrative penalty assessment and resolution of factual issues before a neutral hearing officer under section 309 of the Clean Water Act, the amendment would create an enforcement mechanism which would minimize protracted litigation while ensuring due process and would resolve issues more efficiently and expeditiously.

The efficiency afforded by this administrative assessment plan would be negated if EPA used this procedure to assess penalties for major violations of the Act or complex cases. For this reason, it is EPA's intent to use administrative penalties to address clear and well documented violations of the Act which may not be serious enough to require judicial enforcement.

This plan allows the Agency to use an intermediate enforcement option against those individuals who routinely ignore their responsibilities under the Act. The addition of administratively assessed civil penalties will give the Agency more enforcement flexibility, lead to speedier compliance, and assure due process without the expense and delay of a judicial enforcement action.

2. Criminal Sanctions

Knowing violations of the Act have caused serious environmental harm, millions of dollars of damage to private and public property; in some cases, they have raised the clear potential for loss of

life and/or serious personal injury. A stronger sanction is needed under the Clean Water Act to deter these violations. The addition of felony sanctions will make it clear that knowing violations of the Act are not petty or inconsequential offenses.

The bill we have proposed adds a felony sanction to the Clean Water Act for certain knowing violations of the Act. It should be emphasized that these sanctions are only applicable to knowing violations of the Act. As used in the proposed bill, the word "knowing" is intended to have the same meaning that has been developed by our Courts under the common law traditionally. It focuses on conduct that is voluntary and intentional rather than conduct done by mistake or accident. The existing misdemeanor sanctions under section 309 have been retained for negligent violations of the statute. Thus, our legislative recommendation contains both misdeameanor and felony sanctions.

Specifically, the felony provision would apply to persons who engage in knowing conduct that violates provisions of the Act or conditions or limitations contained in permits issued under the Act. It would also apply to persons who knowingly introduce a pollutant or hazardous substance into a sewer system or POTW which causes or can reasonably be anticipated to cause, personal injury or property damage. Penalties for knowing falsification of required reports, or tampering with monitoring devices have been raised to the felony level. The bill provides an affirmative defense for those who have complied with existing federal, state,

and local requirements which control discharges of pollutants or hazardous substances into a sewer system or a POTW.

The addition of this sanction to the CWA will remedy an anomaly that exists in the current statutory structure for regulating discharges of harmful substances. At present, the Resource Conservation and Recovery Act (RCRA) subjects knowing, illegal hazardous substance activity to felony sanctions. However, that Act does not regulate the release of hazardous substances into a POTW or a sewer system. A person who knowingly dumps hazardous waste on the ground may be subject to felony sanctions under RCRA. However, if he dumps those same materials into a POTW or into a sewer system, he now faces only the misdemeanor provisions of the CWA. The operation of these disparate provisions, then, actually provides an incentive for dumping hazardous waste into the nation's sewer systems -- sewer systems in which the federal government has collectively invested billions of dollars in public funds.

Some have voiced the concern that this proposed provision may be used to harrass or unjustly prosecute individuals for insignificant or unimportant violations. The fact is that EPA has never used criminal sanctions to punish minor, isolated, or inadvertent violations of environmental statutes. This policy will continue in the future, and will ensure that cases referred to the Justice Department under the new CWA felony provision clearly merit prosecution. The criminal case development process is aimed at investigating and referring cases involving

the most serious and indefensible forms of environmental misconduct. This would include, for example, cases involving

1) conduct resulting in or creating a clear potential for environmental harm or human health hazards;
2) conduct reflecting chronic, repeated, or significant violations of environmental laws or regulations;
3) conduct indicating falsification, concealment, or destruction of records or information required to be maintained or reported under an environmental statutes or affecting a matter within the jurisdiction of the Agency;
4) conduct reflecting willful disregard of agreements or court orders resulting from a previous civil or administrative enforcement action.

In addition, it should be noted that all criminal case referrals developed in the Regions are reviewed at EPA headquarters prior to referral to the Justice Department. The purpose of this review is to insure, among other things, consistency with the Agency's criminal enforcement priorities and the general prosecutorial merit of the cases. Finally, following EPA referral, the cases are reviewed again by the Department of Justice (DOJ) and/or the local United States Attorney prior to formal filing. These various reviews will apply to cases referred under the new Clean Water Act criminal provisions and will ensure that those cases present significant violations which merit the imposition of federal criminal sanctions.

The following table provides an indication of the frequency with which this Agency has referred cases to the Department of Justice in the past under CWA criminal provisions.

TABLE 7. NUMBER OF CASES REFERRED TO DOJ BY EPA UNDER THE CLEAN WATER ACT'S CRIMINAL PROVISIONS

1979	12 referrals
1980	13 referrals
1981	15 referrals
1982	5 referrals (two quarters of FY 82)

These cases evidenced conduct such as affirmative falsification of discharge monitoring reports, unpermitted discharges, misrepresentation of compliance with administrative orders, and willful contempt of a civil consent decree.

The addition of a felony sanction will provide a broader range of sentencing options and more flexibility in enforcement to assure that an appropriate response is available to deal with violations of varying gravity. The Clean Water Act is a mature regulatory program. Those regulated by its provisions have had years to become familiar with its requirements. It is appropriate that felony sanctions now be added for deliberate or intentional conduct that is in violation of the Act.

3. Modification Fees

Section 4 of the proposed bill provides the Administrator with the authority to charge fees for processing and reviewing applications to modify or exempt certain effluent limitations,

standards, and requirements under the section 301(c) "economic modification", 301(g) "water quality modification", 301(h) "POTW marine discharge modification", 307(b) proposed "pretreatment exemption", and 316(a) "thermal modification provisions", of the Act. We are proposing environmental modification fees to ensure that those who benefit from these modifications and exemptions will pay for the added EPA burden of analyzing the necessary information and processing the modifications applications. Under this proposal, fees collected by EPA would be used solely for the purposes of processing and reviewing such applications.

The most appropriate method for establishing the fee, we believe would be to set it through the regulatory process within the guidance provided by Congress and after opportunity for comments and suggestions by the public and interested groups. At least two alternative approaches exist for calculating the amount. The first would be to charge a fee according to the actual cost to the Agency of processing an application. The second would be to establish a fixed fee reflecting average costs. Based on past experience, we estimate an average of 65 working days or $7,200 per modification.

The fee system could be set up to require that the total fee be paid to EPA upon submission of the application, or for a portion of the fee to be paid upon submission and the remainder upon determination of completeness of the application. The method of collection would be established by regulation. The regulation could also provide for waiver of fees in certain instances; this

discretionary waiver of fees currently exists under the Freedom of Information Act.

One concern that has been raised with respect to the fee proposal is that it might somehow act as an incentive to require more data from industry since they would be "footing the bill". If a fixed fee were established, the amount of that fee by its very nature would not increase if additional data were requested requiring further Agency analysis. A further point to consider is that the total budget available for processing modifications would be requested in advance by the Agency subject to the Congressional appropriations process. Headquarters and regional processing resources would be allocated in terms of this budget, not in terms of the amount "taken in" during a particular month. The intent behind this proposal is not to subject a potential applicant to unpredictable and unfair charges. Rather, it is to provide that those who could gain from a particular modification and incur the additional federal processing expenses, contribute to easing the extra burden that, otherwise, would also be borne by the public and those who do not request modifications.

C. Increased State and Local Role

Four legislative amendments are proposed to increase the State and local role in administering the Act. This increased discretion is based on our conviction that many of the processes and requirements under the Act, once rigidly controlled in Washington, can and should be administered under the authority of the States and local governments.

1. Pretreatment

The pretreatment program is one area in which the Agency is proposing changes to increase the State and local role. This program was originally established by Congress in recognition that the wastewaters contributed to POTWs by indirect dischargers may cause serious problems in the operation of the treatment system or pass through to the receiving waters with inadequate treatment.

Congress included a two pronged approach to control indirect dischargers in the 1977 Clean Water Act Amendments. This approach reflected many of the requirements contained in the NRDC consent decree that I referred to in my earlier discussion of the Act's general operation. The first element of this approach is the so called General Pretreatment Program which focuses on the POTWs that receive and treat pollutants from indirect dischargers. The second element of this strategy focuses on the indirect dischargers, themselves, and provides for the establishment of national categorical pretreatment standards which they must meet.

The General Pretreatment Program contains two elements. First it contains prohibitions that apply to all nondomestic dischargers to POTWs and are directed primarily at preventing interference with the treatment works. These provisions specifically prohibit the discharge of pollutants which will interfere with plant operations or impair the quality of the sludge sufficiently to violate criteria established for its reuse or disposal. Second, it contains so called "local program" regulations which apply to those POTW's which receive particularly significant amounts of nondomestic pollutant contributions. Local program regulations require the establishment of a legal, administrative and technical framework to be used by those POTW's in regulating their nondomestic dischargers. To ensure effective control of indirect dischargers, these local program regulations require POTW's to identify the specific indirect dischargers contributing to their system and to characterize the volume and nature of their waste dischargers.

The second prong of Congress' pretreatment approach is the establishment of national categorical standards. These are technology based effluent limitations which are designed to be analogous to the technology based limitations for direct dischargers. EPA is required to establish these categorical standards for the 34 major industrial categories thought to be the major source of toxic pollutants contributed to POTWs. Primary responsibility for ensuring implementation of these standards rests with POTW's.

Substantial progress has been made to date in the effort to develop local programs in accordance with the general pretreatment requirements. We estimate that 80 percent of the large POTWs, and 39 percent of the smaller POTWs have made substantial progress towards instituting adequate local pretreatment programs. The construction grants program has obligated $39 million to approximately 600 POTWs to assist this local effort. Furthermore, our estimates indicate that 65 percent of the heavy metals and 37 percent of the toxic organics from indirect industrial discharges are currently being removed through local pretreatment efforts.

In light of this progress at the local level achieved by the general pretreatment program, our approach on the national level has been criticized as being too rigid. Industry feels that national categorical standards are too costly and unnecessary in most cases. POTWs in large cities feel they can do an adequate job in controlling industries without EPA general pretreatment regulations and national categorical standards. While we are attempting to provide more flexibility through regulatory reform initiatives such as our proposed adjustments to removal credits, and our efforts to accelerate establishment of §405 sludge criteria, we do not have sufficient flexibility under the Clean Water Act to address all the criticisms directed at the pretreatment program.

The criticisms of the pretreatment program revolve around two major questions: can the present strategy for categorical

standards be targeted more effectively; and are federally mandated local pretreatment requirements overly detailed and burdensome? I will address these issues in order.

Presently, the Clean Water Act requires EPA to promulgate mandatory national categorical standards for any category of sources which introduces pollutants into POTWs which would interfere with, pass through, or otherwise be incompatible with the treatment works. As I mentioned, the Agency efforts, to date, have focused on the 34 priority industries thought to be the major contributors of toxic pollutants to POTWs. This approach of across-the-board mandatory national categorical standards has been strongly criticized.

The criticism from POTWs in the large cities with many categories of industrial facilities stems from the fact that it is the POTWs who are responsible at the local level for enforcing categorical standards. Those POTWs who have developed local programs to control indirect discharges into their collection systems have also, in most cases, established ordinances with numerical industrial effluent limits to protect the treatment plant. These limits generally include one generic numerical limitation for a given pollutant regardless of the industrial source. For these systems, the issuance of numerous different industrial categorical standards for the same pollutant translates into a potentially inappropriate and burdensome system for the POTW.

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Furthermore, the approach of across-the-board mandatory national categorical standards may require costly industrial treatment where water quality standards are already being met. The Agency believes the national categorical standard program can be refined to address these problems.

A Number of large POTW's have developed comprehensive local pretreatment programs independent of Federal requirements. These programs include major elements identified as essential to effective program operation.

The concern of the larger POTWs focuses on the lack of national program flexibility to recognize the existence of effective local programs. POTWs have operated successful pretreatment programs for many years. They established these programs to protect their facilities and their sludge, to meet water quality requirements, and to facilitate cost recovery. Some of these treatment works set limitations on indirect dischargers comparable to national categorical pretreatment standards. The cities and municipalities in which these POTWs are located strongly feel that their local efforts are adequate and that Federal program requirements are unnecessary.

Agency Review

To review these criticisms and evaluate the cost-effectiveness of the present approach, the Agency has undertaken two major analytic efforts.

The first effort began in 1978 and is commonly referred to as the 40 city study. The purpose of this study was to determine the fate of priority toxic pollutants in POTWs. Wastewater and sludge samples were analyzed to determine the presence and concentration of the 129 priority pollutants at the 40 cities included in the study.

Table 8 shows that well operated secondary treatment plants do a good job of removing many heavy metals and toxic organics. Figures 4 and 5 show that only a relatively few cities have unusually high influent concentrations of heavy metals and toxic organics. These pollutants are related to industrial discharges and can be reduced with pretreatment programs.

The second major analytic effort began in April 1981 when the Agency initiated a regulatory impact analysis (RIA) of the pretreatment program. The objective of this analysis was to quantify the magnitude of the problems caused by indirect industrial discharges and to evaluate the effectiveness current approach and potential alternatives. The RIA involved a significant effort to collect and evaluate all available data. That data was then analyzed in a computer model which compared the costs and benefits of a number of policy options. This involved quantifying the environmental and economic impact of various federal strategies on 2,000 POTWS. The 2,000 POTWs include all plants nationwide

TABLE 8. TYPICAL POTW REMOVAL RATES

Pollutant	Percent Removal
Metals	
Cadmium	61
Lead	70
Nickel	33
Chromium	76
Silver	78
Copper	82
Zinc	77
Others	
Cyanide	72
Volatile Organics	75
Other Organics	63

Source: 40 City Study

discharging more than five million gallons per day (MGD), and smaller plants with a history of operational problems or with toxic industrial contributors.

Following are some of the report's major findings.

- There has been substantial control of metals by industrial pretreatment - 65 percent reduction from raw discharge levels.

Figure 4. Ranking of Influent and Effluent Concentrations of Total Toxic Organics

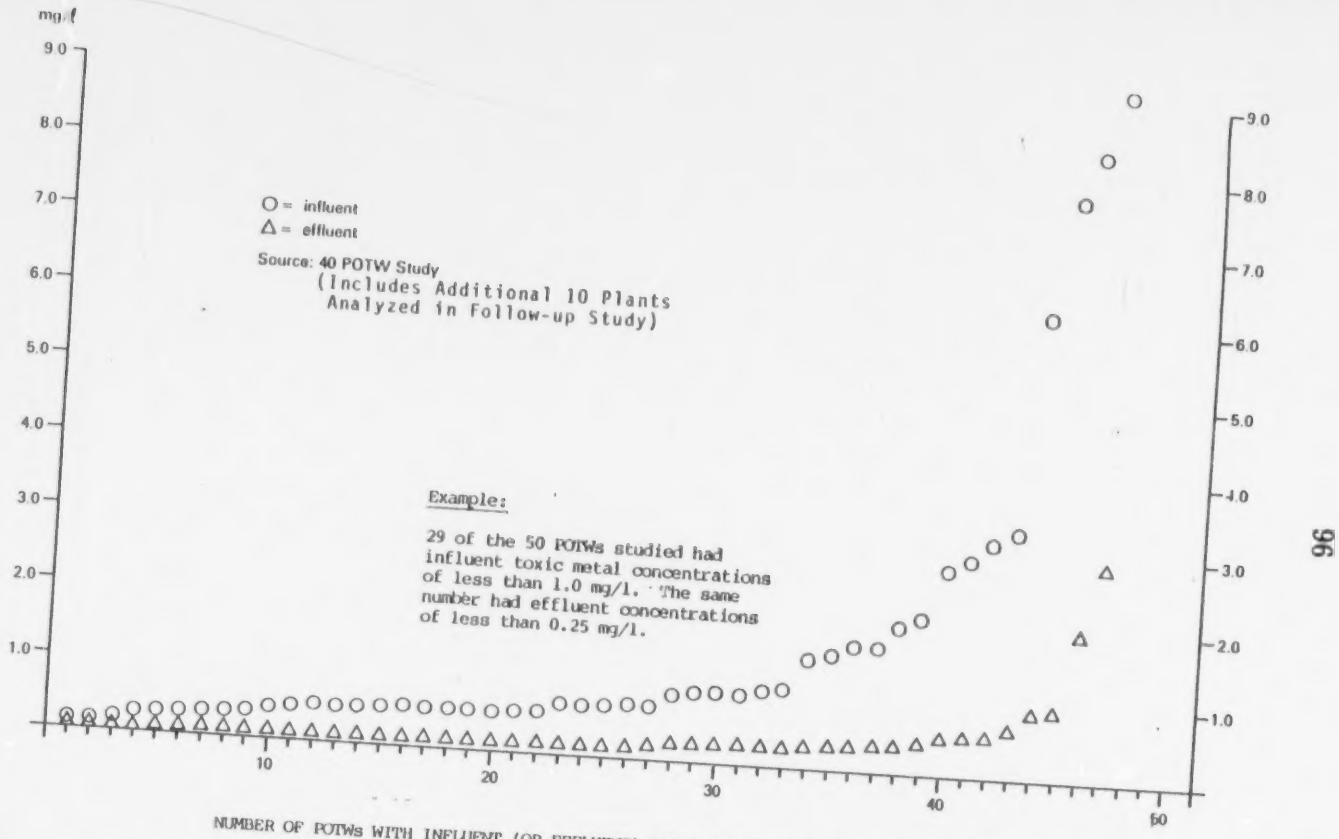


Figure 5. Ranking of Influent and Effluent Concentrations of Total Toxic Metals

- The Metal Finishing industry represents 60 percent of the metals currently discharged to POTWs.
- There is less control of toxic organics discharged by industries - 37 percent reduction from raw discharge levels.
- The Organics and Plastics industry represents 81 percent of the current discharge of toxic organics by industry into POTWs.
- The primary reasons for existing control of indirect dischargers are:

  -- local pretreatment programs,
  -- industrial reuse and recovery, and
  -- anticipation of regulations.

- The motivation for local pretreatment programs is:

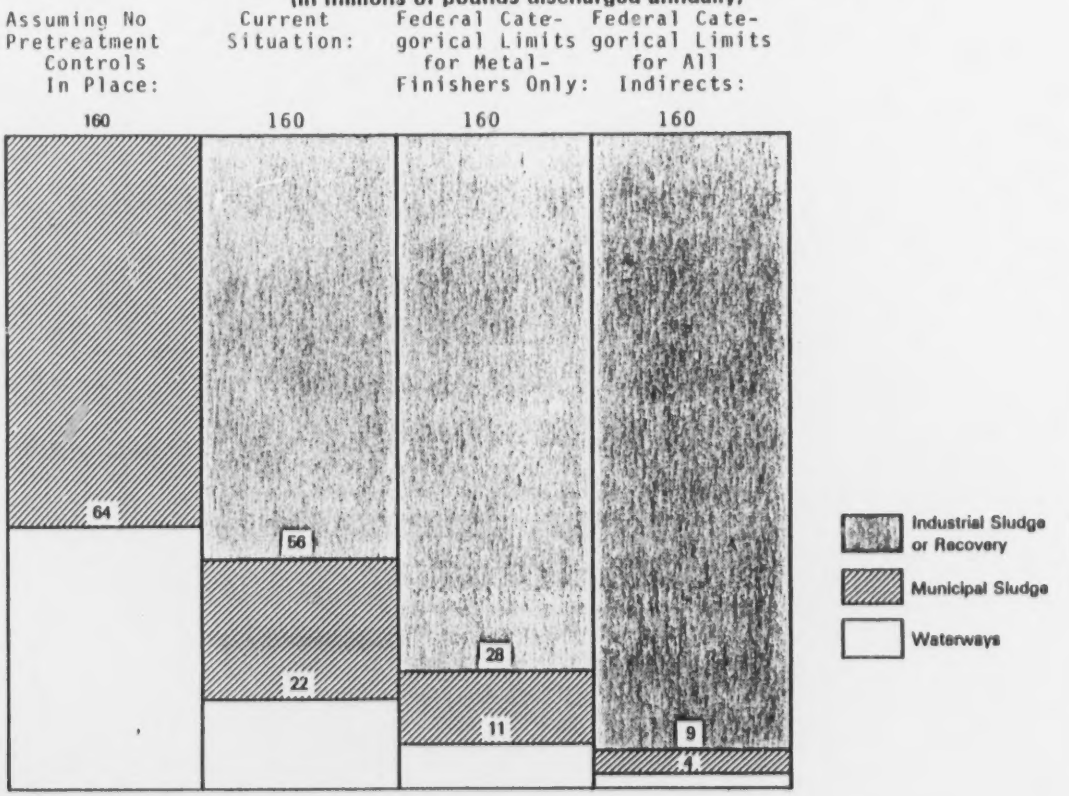
  -- State/Federal requirements..... 38%
  -- POTW protection..... 27%
  -- POTW cost recovery..... 8%
  -- Water quality..... 8%
  -- Sludge quality improvement..... 6%
  -- POTW Worker Health & Safety..... 1%

- State toxic water quality standards are limited.
- Pretreatment would on the average reduce heavy metals and toxic organics in municipal sludges by 52 and 67 percent, respectively.

Several of these conclusions are depicted in Figures 6 and 7 which show the effectiveness of the current general pretreatment program and the results projected to be gained by two additional increments of control.

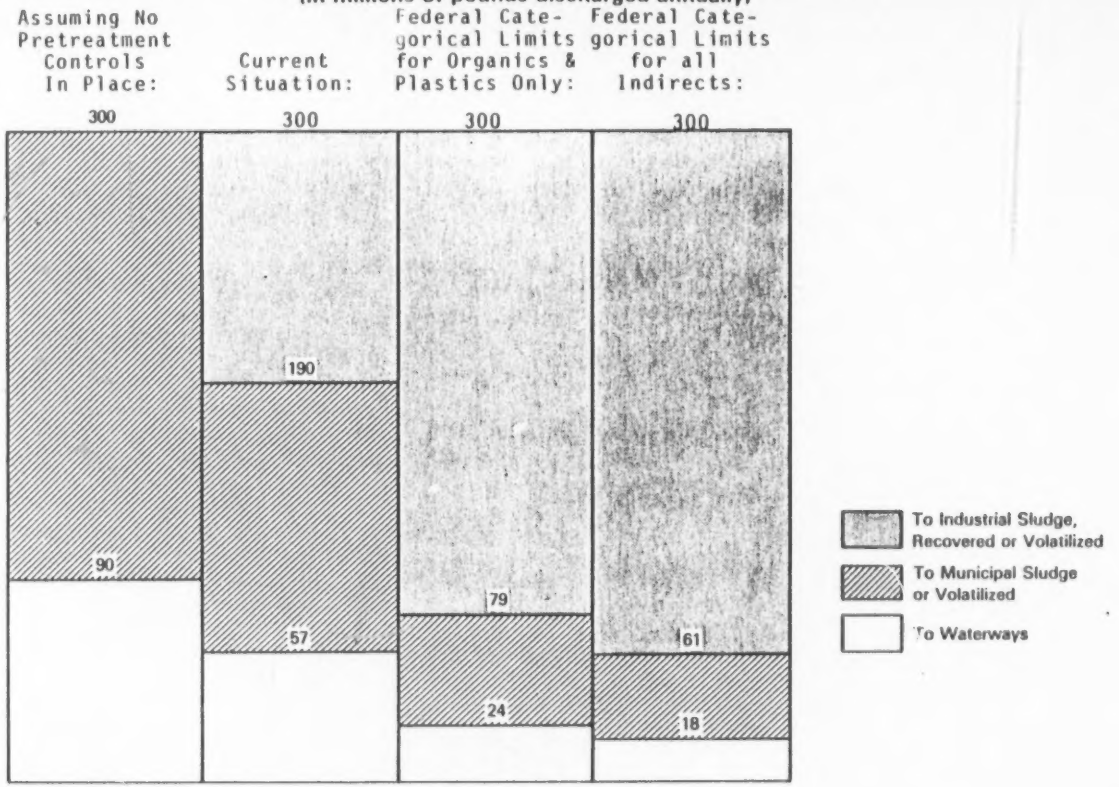
Table 9 taken from the RIA compares the pollutant loadings from direct and indirect industrial dischargers in the major industrial categories. The RIA documented the extensive problems caused by indirect dischargers. These problems include impaired

Figure 6. Fate of Toxic Metals from Indirect Industrial Dischargers (in millions of pounds discharged annually)



Source: RIA for General Pretreatment (60% removal at POTW)

Figure 7 Fate of Toxic Organics from Indirect Industrial Dischargers (in millions of pounds discharged annually)



Source: RIA for General Pretreatment (70% removal at POTW)

operation of the plant, sludge contamination, and adverse water quality impacts in the receiving waters. Our analysis indicates that, before any pretreatment controls were installed, indirect industries generated 82 percent of the heavy metal loadings entering POTWs. Subsequently, many POTWs developed effective programs that have resulted in significant control of heavy metals. The RIA estimates that at present, industrial dischargers are responsible for 58 percent of the heavy metals that enter POTWs.

Agency Response -- Proposed Amendments

Both the 40 City study and the RIA generated extensive data on pretreatment that had not been previously quantified or aggregated. Based on the year long review which included the results from these studies, and public comments, EPA formulated the proposals set forth in our legislative recommendations. Although changes are proposed, we are requesting that the fundamental statutory framework be preserved.

Our review of the pretreatment program demonstrated the need for a federal program both to reach those POTWs that have not as yet initiated a local program, and to provide a strong federal backup for those POTWs that are already controlling their industrial dischargers. As indicated earlier, results of the review indicate that the Federal and State role was primarily responsible for development of more than a third of the local programs currently in place.

The lengthy program review convinced us that pretreatment is a necessary and important part of our national effort to achieve

TABLE 9. COMPARISON OF DIRECT VS. INDIRECT DISCHARGES

Indirect Discharge**

Industry	Total Toxic Metals (Pounds/Year)			Total Toxic Organics (Pounds/Year)		
	Raw	Current	BAT	Raw	Current	BAT
Metal Finishing/ Electroplating	120,000,000	22,000,000	3,500,000	86,000,000	26,100,000	12,100,000
Iron and Steel	12,000,000†	3,100,000	72,000	29,000,000	7,200,000	1,200,000
Leather Tanning	5,700,000	5,700,000	400,000	580,000	580,000	580,000
Aluminum Forming	8,400,000	4,200,000	0		210	40
Pulp, Paper Paperboard	920,000	920,000	920,000	1,000,000	1,000,000	1,000,000
Inorganic I & II	3,300,000	1,400,000	80,000	–	–	–
Porcelain Enameling	1,400,000	1,300,000	0	–	–	–
Copper Forming	870,000	870,000	20,000	–	–	–
Organics & Plastics	790,000	707,000	79,000	171,000,000	154,000,000	43,000,000
Textiles	580,000	580,000	570,000	1,050,000	1,050,000	1,050,000
Petroleum Refining	580,000	580,000	580,000	2,000,000	2,000,000	2,000,000
Foundries	1,700,000	330,000	0	220,000	60,000	–
Coil Coating	360,000	210,000	210,000	3,300	1,900	1,900
Electrical	180,000	180,000	180,000	313,000	230,000	60,000
Battery	2,300,000	160,000	0	100	80	1
Non Ferrous	–	130,000	10,000	1,800	630	630
Paint	610,000	130,000	130,000	300,000	40,000	38,000
Steam & Electric	20,000	20,000	2,000	–	–	–
Pesticides	24,000	16,000	0	240,000	240,000	30,000
Timber	8,530	6,250	6,250	110,000	45,000	45,000
Ink	2,000	1,900	800	8,900	1,300	1,300
Pharmaceuticals	53,000	–	–	–	–	–
Totals	180,000,000	56,000,000	8,900,000	300,000,000	180,000,000	61,000,000

Direct Discharge

Industry	Total Toxic Metals (Pounds/Year)			Total Toxic Organics (Pounds/Year)		
	Raw	Current	BAT	Raw	Current	BAT
Metal Finishing/ Electroplating	44,000,000	1,500,000	1,500,000	33,000,000	9,600,000	4,000,000
Iron and Steel	18,120,000†	2,400,000	580,000	25,000,000	4,800,000	280,000
Leather Tanning	530,000	83,000	18,000	90,000	15,000	4,000
Aluminum Forming	4,500,000	2,800,000	0	–	410	250
Pulp, Paper Paperboard	4,600,000	2,800,000	2,800,000	8,600,000	620,000	520,000
Inorganic I & II	7,900,000	700,000	140,000	–	–	–
Porcelain Enameling	270,000	260,000	0	–	–	–
Copper Forming	590,000	590,000	20,000	–	–	–
Organics & Plastics	154,000,000	7,100,000	2,700,000	447,000,000	172,000,000	45,000,000
Textiles	470,000	380,000	220,000	710,000	85,000	52,000
Petroleum Refining	1,300,000	580,000	280,000	5,900,000	20,000	10,000
Foundries	11,000,000	1,700,000	0	1,400,000	390,000	0
Coil Coating	440,000	260,000	0	4,000	2,400	0
Electrical	62,000	62,000	62,000	100,000	99,000	19,000
Battery	680,000	200,000	–	177	73	0
Non Ferrous I	63,000,000	14,000,000	0	19,000,000	6,900,000	800,000
Paint Forming	21,000	5,900	800	80,000	1,300	1,300
Steam & Electric	700,000	700,000	20,000	–	–	–
Pesticides	21,000	11,000	1,000	220,000	15,000	1,000
Timber	–	–	–	–	–	–
Ink	–	–	–	–	–	–
Pharmaceuticals	25,000	11,000	–	–	–	–
Totals	310,000,000	36,000,000	8,100,000	540,000,000	130,000,000	50,000,000

*Does not include Paragraph 8 subcategories, and based on EPA projections

**Loadings are estimation of pounds discharged into sewers prior to treatment at the POTW

†Refers to 1972 discharge

and maintain clean water. Given the clear need for pretreatment, the issue, then, is how should it be implemented on the national and local level? We believe that many of the problems plaguing the program can be addressed by continuing the Federal presence, but also by allowing the Agency discretion on a national level to target the major industrial contributors while relying more on the decisions and demonstrated ability of local government to run local programs. Our proposal, therefore, recommends three major changes which I will discuss in order.

Discretionary Categorical Standards

Our first recommendation is that EPA be provided authority to target national categorical pretreatment standards on the major contributors of toxic pollutants to POTWs. The RIA made clear that there is a large variation among the priority industries in terms of amounts of toxic pollutants discharged. For example, as Table 10 indicates, there are 10,200 metal finishing facilities in operation which discharge a total of 32,000,000 pounds of toxic metals a year and 26,000,000 pounds of toxic organics. There are also 470 organics and plastics facilities in operation that contribute 710,000 pounds of toxic metals a year and 150,000,000 pounds ot toxic organics. In contrast Table 10 demonstrates that some of the categorical industries have less than one hundred facilities and contribute less than one percent of the total loadings.

While no two industrial categories are exactly alike, it is quite clear that distinctions can be made as to their relative

TABLE 10. INDIRECT DISCHARGE, POUNDS PER YEAR

Industry Category	Number of plants	Total Toxic Metals Current	Total Toxic Organics Current
Metal Finishing/ Electroplating	10,200	32,000,000	26,000,000
Iron and Steel	96	3,100,000	7,200,000
Leather Tanning	140	5,700,000	580,000
Aluminum Forming	59	4,300,000	210
Pulp, Paper, Paperboard	250	920,000	1,000,000
Inorganic I & II	44	1,400,000	--
Porcelain Enameling	89	1,300,000	--
Copper Forming	32	970,000	--
Organics & Plastics	470	710,000	150,000,000
Textiles	930	580,000	1,050,000
Petroleum Refining	53	580,000	2,000,000
Foundries	360	330,000	60,000
Coil Coating	32	210,000	1,900
Electrical	240	160,000	230,000
Battery	190	150,000	90,000
Non Ferrous	63	130,000	630
Paint	770	130,000	40,000
Steam & Electric	93	20,000	--
Pesticides	38	16,000	240,000
Timber	47	6,200	45,000
Ink	220	1,900	1,300
Pharmaceuticals	270	--	--
TOTALS	14,686	56,000,000	190,000,000

Loadings are estimation of pounds discharged into sewers prior to treatment at the POTW.

contribution to national pollutant loadings. The information noted above supports the contention that most of toxic pollutant problem can be addressed by promulgating a handful of national categorical standards in mandatory form. EPA strongly believes that this approach makes a great deal more sense than the present strategy, that it would be more cost-effective, and that more efficient control would result.

In advocating this approach, let me be absolutely clear that the absence of mandatory national pretreatment standards for certain industrial categories does not mean that there would be no control of toxic discharges by these industries. Local pretreatment programs would still regulate these industries. Moreover, where EPA chose not to issue a national categorical standard, it would issue guidance material based on its data gathering and research. This material could be used by States and POTWs in developing and supporting local discharge limitations. Additionally, a number of industries are controlling their discharge of toxic pollutants as a means of saving money. As the cost of materials increases, we expect this recovery and reuse to spread.

We have seen that well operated secondary treatment plants remove large quantities of the toxic pollutants in sewage. We have also noted that many local POTWs have long standing pretreatment programs. Our first proposal was that we target our mandatory guidelines on the major sources of toxic pollutants.

Exemptions From Categorical Standards

Our second recommendation is intended to reduce the possibility of requiring treatment for treatment's sake and to give State and local authorities as much flexibility as possible in devising effective local control strategies. We propose that the Act be modified to allow POTWs with effective local programs to receive exemptions from national mandatory categorical pretreatment standards on behalf of those industries contributing to the POTWs.

What we are proposing is to give States and local authorities the opportunity to exercise the responsibility which is theirs under the Act. We fully recognize that not all POTWs presently have adequate programs, and therefore may be unable to assure the control that is critical to achieving the objectives of the Act. However, where a POTW has an effective local program which controls pollutants so that they do not interfere with attainment and maintenance of the receiving water's designated uses, it should not be forced to bear the burden of unnecessary federal requirements. Unless we provide the mechanism for redirecting some of the responsibilities in the area of pretreatment, the goal of increased State and local control will never be reached. Clearly our national responsibilities dictate that this must be done carefully and with adequate safeguards. These safeguards will mean that not all POTWs can begin this process at once, but some will, and others will have the incentive to move in this direction.

Our proposal would allow a POTW to obtain exemptions from

national categorical pretreatment standards for their indirect dischargers. But this exemption would only be available to POTWs which have:

- o An effective local pretreatment program
- o Secondary treatment in place
- o End-of-pipe limits which assure that their discharges will not interfere with the attainment and maintenance of designated water uses.

Acceptable local pretreatment programs are those that have identified their non-domestic contributors, characterized their wastes, and have the legal authority and enforcement ability to implement a local toxic pollutant management control program.

The second criterion is that the qualifying POTW must be in compliance with secondary treatment. This criterion is essential to assure a minimum level of toxics control. Our studies have clearly demonstrated that there is substantial toxics removals by well operated secondary treatment plants. Moreover, we know that a large number of POTWs are already at this level of control. We should insist on taking advantage of the investment we have made in this level of control.

The third criterion is end-of-pipe POTW permit limits which assure that discharges will not interfere with the attainment and maintenance of designated water uses. Effluent limits would be required for any pollutants which pass through the POTW in quantities sufficient to interfere with the attainment and maintenance of designated uses.

The necessity of specific effluent limits, and the appropriate level of stringency, would be determined by the permit authority using such site-specific factors as state water quality standards, or if not available, bioassays, and biosurveys. In most situations, effluent limitations will be established through the same process using the same techniques by which water quality standards are currently translated into NPDES permits limitations.
make available, additional scientific techniques for use in the Furthermore, additional water quality standards will be generated as a result of the 1981 Clean Water Act amendments, which require states to review and, if necessary, revise their standards within three years.

Exemptions From Administrative Requirements

Our third legislative proposal would allow POTWs with effective local programs to obtain exemptions from the administrative requirements of the General Pretreatment Program.

We believe that it is unnecessary for cities with pretreatment programs equivalent to what would otherwise be required under the General Pretreatment regulations to comply with the specific administrative details of those regulations. This exemption will avoid unnecessary and burdensome Federally imposed administration and reporting requirements.

The exemption would be based on a certification by the POTW

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that certain basic elements common to any good local program exist. In general, the elements include the existence of adequate legal authorities, enforcement mechanisms, and monitoring procedures. These are all part of the effective local program that we have just described for exemptions from national categorical standards. The certification would also include the assurance that the local program adequately addresses water quality and sludge disposal requirements.

Finally, let me emphasize that this proposed exemption would extend only to the administrative requirements of the General Pretreatment requirements. The mandatory general prohibitions relating to heat, corrosion, explosives, solids and pollutant concentrations would remain in effect regardless of whether an exemption was obtained.

Basic to the whole concept of exemptions is their dependency on good results. We have no intention of simply granting an exemption and turning away. Each POTW NPDES permit requires daily, weekly, and monthly effluent quality analysis to be submitted quarterly to the permitting authority. This is supplemented by compliance monitoring inspections conducted by the permit authority. These analyses and inspections form the basis for a determination of the POTW's compliance with applicable permit limitations. Our proposal expressly reserves to the States and EPA the authority to withdraw the exemption of a POTW

if it fails to meet the conditions of its exemption.

If these recommendations are approved, the Agency will move expeditiously to implement them by promulgating the necessary standards and guidance. Regulations establishing the waiver application process will be issued within 18 months of the statutory changes.

In addition to these legislative recommendations, there are a number of regulatory modifications that the Agency is pursuing. These include its priority efforts to promulgate §405 guidelines for municipal sludge. We are well aware that they are closely linked to the development of pretreatment programs and the attainment of statutory goals and we are, therefore, giving them special emphasis.

EPA has established a Sludge Management Task Force under the direction of the Assistant Administrator for Water. The Task Force will prepare the sludge management guidelines required under Section 405 in cooperation with two other EPA offices--the Office of Solid Waste and Emergency Response and the Office of Policy and Resources Management. The Agency has committed $485,000 in recently reprogrammed extramural funds to this project and contractors already employed by the Office of Solid Waste and Emergency Response in the area of land disposal will be available to assist in this effort.

The Administration is committed to developing the guidelines required under Section 405 of the Act as the essential element

of the sludge management systems operated by local governments. A definite schedule of guideline production cannot be specified yet. However, it is intended that the sludge guidelines be produced in 1983, and that they be available to guide the implementation of the amended pretreatment program recommended in this legislation.

This policy and our legislative recommendations will streamline the pretreatment program and make it more workable. The program will be more widely accepted because it takes a number of steps to reward the POTW's with good pretreatment programs and good records of permit compliance. It will also accelerate more cost-effective toxics control and POTW protection by concentrating Agency attention and resources where they are most needed. Finally, it moves in the direction of linking the results of pretreatment to attainment of designated uses.

In summary, EPA feels this proposal builds upon the extensive and important work done to date by POTWs, States, industries and the Agency. It addresses the most serious regulatory and administrative problems associated with pretreatment and provides a realistic strategy to attack the overall toxics problems caused by indirect discharges. It does this in a balanced cost-effective way that realizes the full potential of the existing partnership between Federal, State, and local levels of government.

2. Thermal Standards

In 1972, the Congress defined heat to be a pollutant and the

thermal component of discharges to be subject to both technology and water quality based standards. Congress determined, however, that heat should be dealt with differently than other pollutants and authorized special provisions for modifications of thermal effluent limitations. Modifications were available to both new and existing sources upon a demonstration that the modified effluent limitations would assure the protection and propagation of a balanced, indigenous population of fish, shellfish and wildlife. This was in recognition of the fact that the capacity of receiving waters to dissipate heat generally causes the thermal component of a discharge to have a temporary, localized effect.

The Act also required the location, design, construction and capacity of cooling water intake structures of new and existing thermal sources, such as steam-electric generating plants, to reflect the best technology available for minimizing adverse environmental impacts.

Our recommended amendment would allow there to be different evaluation criteria for proposed modifications of technology-based as opposed to modifications of water quality-based thermal effluent limitations. Applications proposing modifications of thermal technology-based standards would be subject to a demonstration of attainment and compliance with thermal criteria contained in State adopted (and EPA approved) water quality standards, or, in the case of discharge beyond State-controlled waters, ocean discharge criteria.

The thermal water quality criteria referred to in our proposed amendment are distinct from and should not be confused

with criteria published by EPA in its Red Book on Quality Criteria for Water. The criteria referred to in our legislative recommendation are developed by States to protect the uses that are designated for the specific water body in question. Designated uses and water quality criteria together make up the water quality standards, and after adoption by the State are subject to EPA approval. EPA's so-called "Red Book" water quality criteria are issued by the Agency for use as guidance by States after site specific modifications, in developing water quality standards. All States have approved water quality standards, containing thermal criteria. Mathematical models are available for translating these standards into effluent limitations for specific sources.

The existing provision, which requires a demonstration of a balanced indigenous population of fish, shellfish and wildlife, carries with it a substantial technical and administrative burden. Such demonstrations require a great amount of data, some of which may duplicate the tasks, previously carried out by the State in developing its water quality standards.

In addition to reducing the administrative and technical burden on dischargers and reviewing agencies, our proposal would provide States with increased flexibility in the level of protection to be provided. EPA water quality standards regulations encourage extensive and open public debate on proposed water quality standards, their attainability, their benefits and their costs. In some cases the currently inflexible mandate for a balanced indigenous population of fish, shellfish and wildlife may be simply unattainable or attainable only at extreme cost.

Applications proposing modifications of thermal water quality-based effluent limitations would be subject to a demonstration that they would assure a balanced population of fish, shellfish and wildlife. Such applications may be submitted when the discharger believes that its effluent limitations are more stringent than necessary. The change we are proposing from existing law is the deletion of the term "indigenous." This term has been the cause of considerable confusion. It has been variously interpreted to mean the aquatic ecosystem existing prior to human habitation, or the aquatic ecosystem that would exist absent pollution. Such interpretations have resulted in unreasonable and costly levels of protection being provided, especially since Section 303(g) provides that these requirements are to be the basis for establishing thermal water quality standards.

Our proposal would allow States more flexibility in fine tuning their water quality based thermal effluent limits so that they are realistic and are achievable at a reasonable cost.

The amendment we have suggested to the intake structure provision would allow dischargers to use measures equal in effect to the best technology available to mitigate adverse effects. The intake structures of concern were largely constructed prior to the establishment of environmental standards under Section 316. As a consequence it is often infeasible or extremely costly to modify or relocate them to address such problems as the entrainment of larvae or juvenile fish in cooling water. Such factors are

routinely taken into account now in the planning of new facilities. The existing statutory language is very restrictive in that it authorizes only one option, best technology available, to mitigate such problems.

We believe that our proposed amendment would provide needed flexibility to address these problems with no loss of environmental protection. In the example I have used, the utility could construct and operate a fish hatchery to replace those fish lost as a result of the operation of its plant.

Because new intake structures can be located so as to avoid such problems and improved technology can be more easily incorporated into their design, we have not proposed any changes to the requirement of best technology available for new intake structures.

3. Partial NPDES Program Approval

In Section 13 we propose to allow the Administrator to approve partial State administration of permit programs. Once a State has assumed administration of the permit program in whole or part, it is committed to administering all the parts of the program under its control or returning the program entirely to EPA. Currently, States wishing to administer the NPDES program must assume all major components (e.g., municipal and industrial dischargers, federal facilities and pretreatment) of the program before EPA is authorized to approve State assumption. We are recommending a change at this time to remove the barriers to formal recognition of the role many States now play in defining

permit conditions, enforcing permits, and managing pretreatment programs. This will provide States with the flexibility to seek approval for those parts of the program which they can administer immediately.

Partial approval is an essential means of allowing States to assume greater responsibility for water pollution control. This legislative proposal will encourage States, which may have immediate difficulty financing the entire permit effort, to initially run at least part of the program. Partial approval will also provide an incentive to other States to seek approval although presently they may either lack sufficient authority to run a particular part of the NPDES program (e.g., pretreatment in Puerto Rico), or simply prefer continued EPA control over certain components while they become familiar with administration of the balance of the program (e.g., Arkansas). Such an approach allows the State to gain experience with this complex regulatory program one step at a time.

Upon assumption of the permit program, or any major part of it, the State takes over permit issuance from EPA and becomes the primary agent to enforce such permits. Under the Clean Water Act, EPA retains an overview role, using such tools as delegation agreements and quarterly performance audits.

At least three States--Oklahoma, Texas and Arkansas, as well as Puerto Rico--have indicated their interest in applying for partial approval. Initially, Oklahoma would probably assume administration of the permit program for industrial discharges,

and then subsequently take on the permitting of municipal discharges and administration of the pretreatment program. Texas has indicated a strong interest in assuming all of the permit program, except for oil and gas permits. In Arkansas, State officials intend to seek EPA approval of the NPDES program in several steps including phased approvals for mining permits, municipal permits, industiral permits, federal facilities and pretreatment. Finally, in Puerto Rico, the Commonwealth would likely seek approval of the entire NPDES program, except for pretreatment, for which it needs more time to develop local requirements and obtain adequate financing.

Presently, 35 States have been approved to administer the basic NPDES program. Several of these States have also been approved to permit Federal facilities and pretreatment programs. Currently, 11 States have fully approved programs, including both pretreatment and permitting of Federal facilities. In addition, 14 States have pretreatment programs and 22 States regulate Federal facilities. Table 11 provides the current status of all NPDES program approvals.

TABLE 11. STATUS OF PERMIT PROGRAM APPROVALS

	Approved State NEDES permit program	Approved to regulate Federal facilities	Approved State Pretreatment program
Alabama	10/19/79	10/19/79	10/19/79
California	05/14/73	05/05/78	
Colorado	03/27/75		
Connecticut	09/26/73		06/03/81
Delaware	04/01/74		
Georgia	06/28/74	12/08/80	03/13/81
Hawaii	11/28/74	06/01/79	
Illinois	10/23/77	09/20/79	
Indiana	01/01/75	12/09/78	
Iowa	08/10/78	08/10/78	06/3/81
Kansas	06/28/74		
Maryland	09/05/74		
Michigan	10/17/73	12/09/78	
Minnesota	06/30/74	12/09/78	07/16/79
Mississippi	05/01/74		05/13/82
Missouri	10/30/74	06/26/79	06/03/81
Montana	06/10/74	06/23/81	
Nebraska	06/12/74	11/02/79	
Nevada	09/19/75	08/31/78	
New Jersey	04/13/82	04/13/82	04/13/82
New York	10/28/75	06/13/80	
North Carolina	10/19/75		06/14/82
North Dakota	06/13/75		
Ohio	03/11/74		
Oregon	09/26/73	03/02/79	03/12/81
Pennsylvania	06/30/78	06/30/78	
South Carolina	06/10/75	09/26/80	04/09/82
Tennessee	12/28/77		
Vermont	03/11/74		03/16/82
Virgin Islands	06/30/74		
Virginia	03/31/75	02/09/82	
Washington	11/14/73		
West Virginia	05/10/82	05/10/82	05/10/82
Wisconsin	02/04/74	11/26/79	12/24/80
Wyoming	01/30/75	05/18/81	

Table prepared June 4, 1982.

D. Clarifications of the Existing Act

Mr. Chairman, four of the legislative amendments we are proposing would increase the workability of the existing Clean Water Act and clarify its provisions. Earlier, I discussed an amendment to section 301(i) which would clarify the intention of Congress to extend the municipal compliance deadlines. I would now like to discuss three other proposals that will clarify the Act. These amendments involve Presidential exemptions, the definition of munitions, and the regulation of dams.

1. Presidential Exemptions from CWA Requirements

The Federal Water Pollution Control Act Amendments of 1972 provided for Presidential exemptions for Federally-owned or operated facilities in recognition of their critical role in the national defense and other special circumstances. In 1977, in response to a Supreme Court decision, Congress clarified section 313 of the Act to provide that all Federal facilities must comply with all substantive and procedural requirements of Federal, State, or local water pollution control laws. It also eliminated the exception for Federal agencies from State certification of activities under section 401. After additional study, we believe that additional clarification of section 313 is warranted.

Section 313 currently authorizes the President to exempt specific sources and categories or classes or property from compliance with certain Federal, State or local pollution control requirements when he determines it to be in the paramount interest of the United States to do so.

The proposed new language would permit the President, upon a finding of paramount interest of the United States to exempt any executive branch, department or agency's effluent source from compliance (as is presently the case), but would also stipulate that existing wastewater treatment facilities must be used at their full design capacity and require compliance at the earliest possible date. This exemption and corrective measure would be extended to apply to new sources and to toxic pollutants which are presently excluded from its coverage.

The proposed change would also authorize the President to approve exemptions for up to three years. A three-year period is more realistic to accomplish design and construction. The President would also be empowered to issue regulations exempting facilities and other property which are essential to the national defense, regardless or whether they are "uniquely military in nature," which is the present requirement.

The Department of Defense advises us that the most likely situation in which it might seek to use the Presidential exemption authority involves inactive Army ordnance production capacity at eight Army ammunition plants. These facilities, if operated during mobilization or national emergency, would be unable to comply with all Clean Water Act requirements. They are not presently out of compliance. However, any surge in production at this time would force them over the standards. Under present funding policy, it is not sound management to make large expenditures to purchase and install equipment which may never be required,

which are difficult to design and, if required at some future date, may then be obsolete. Under the proposed amendment, DoD would after consultation with EPA seek a presidential exemption only if these plants had to be activated. If that occurred, the plants would be required to use any existing wastewater treatment controls, and at the same time to provide for complete treatment as soon as possible.

The existing exemption provisions do not include weapons or weapons material production facilities not owned or operated by the Armed Forces. Extension of section 313 to include such facilities, which are presently owned or operated by the Department of Energy, is clearly consistent with its intent since their products are essential to the national defense. They are subject to the same suddenly increased production demands as other defense facilities. While such occurences are likely to occur very infrequently, we think it prudent to address them so as not to hinder national defense capabilities.

Finally, a new provision would be added authorizing the President to suspend or modify the application of the provisions of this Act during the period of any war declared by Congress, and during the period of any national emergency declared by Congress or the President. This proposal would reduce the possibility that the law would create a conflict between the prosecution of the common defense and the promotion of environmental quality goals during any future conflict.

We are recommending these three changes because we believe that the existing provisions are not sufficiently flexible to address the kinds of unusual but possible circumstances for which they were originally drafted. The rapid shifts in pollutant loadings that would be experienced as a result of a war, national emergency, or Armed Forces mobilization are very difficult to anticipate in terms of their location, nature and duration. Once the probability of such increased loadings had been identified, the planning, development, design and construction of new or modified wastewater treatment facilities would take time. Our recommended changes would accomodate these situations.

2. Munitions

In the Clean Water Act Amendments of 1972, Congress defined the term "pollutant" to include munitions. Recently, there has been some question as to whether the term includes the general expenditure of munitions by the military. DoD has traditionally interpreted the term "pollutant" to mean only "waste munitions." Recently, however, a Federal Court Judge ruled that the literal meaning of the Act was not limited to waste munitions. Thus, ships and aircraft which engage in target practice with live shells and bombs were found to be in violation of the Clean Water Act because DoD did not possess a NPDES permit for rounds which fell accidentally in the territorial seas. This ruling has obvious application to military training and readiness inasmuch as States may refuse to issue the required permit certification.

We do not believe this to be the intent of Congress and therefore propose that this provision be clarified.

Our legislative proposal is a narrow one to clarify the Act so that the definition of a pollutant does not include the expenditure of conventional munitions by the Armed Forces, or by its allies in joint training exercises. The expenditure of nuclear, chemical and biological munitions within navigable waters would continue to be subject to the Clean Water Act requirements, should current statutory controls on their expenditures be changed in the future.

3. Dams

An issue which has recently arisen is the applicability of the NPDES program to dams. EPA's longstanding position is that dams are not point sources discharging pollutants into navigable waters, and therefore are not subject to the NPDES program. In January of this year, a district court rendered a decision overturning EPA's position and ordering EPA to first, designate dams as a point source category under the Clean Water Act; second, establish effluent limitations or other performance standards for dams on a categorical basis; third, classify new and existing dams on a categorical basis; fourth, regulate new and existing dams under the requirements of the NPDES permit program. EPA was ordered to issue final regulations within 90 days.

I am very concerned about this decision. I do not believe there is evidence that dams represent a nationally significant problem. It is also clear that where water quality problems do

arise in local situations because of a dam, they can be more effectively addressed through State water quality management planning and standards programs.

While we have filed an appeal on this decision, I believe that a clarification of the Act is necessary and appropriate at this time. Implementation of this decision would have a significant impact on the utilization of EPA and State permitting resources -- a misallocation in my opinion. The first part of our legislative proposal would exempt from the requirement to obtain an NPDES permit any dams with water quality effects resulting solely from impoundment of water, or resulting solely from the method of release of impounded waters. This provision has been very carefully drafted so as not to exempt any waste lagoons or waste impoundments.

The second part of our legislative proposal would encourage States to identify dams with adverse water quality effects, and where such effects are found, to set forth procedures and methods to control such dams to the extent feasible. This provision would neither add to nor diminish State authority to regulate dams.

State water quality standards can be used to identify areas where dam-related water quality problems actually exist. States are better able to choose effective control measures that strike a balance between water quality benefits and the other purposes of water projects, particularly energy production, irrigation, flood control, and navigation. State pollution

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control agencies are better situated to assure coordination with State water resource agencies, and prevent conflict between pollution control measures and existing State water rights and water allocation systems.

Information available to EPA does not indicate that dam related problems from atmospheric gas supersaturation, changes in thermal patterns, sediment releases or low dissolved oxygen are among the more significant water quality problems or that any such dam-related problems are nationwide in scope. Problem dams have been identified in a few areas of the country, but the number of problem dams identified to date does not constitute a significant portion of the number of the nation's dams that are potentially subject to regulation under the court's order. Because we do not have reliable techniques to distinguish problem dams from those which have no environmental impact on the basis of structure, size, or location, the court's order potentially could require EPA to regulate all the Nation's dams.

Including all dams in the NPDES program would result in a massive increase in the number of facilities regulated under NPDES. To date, the EPA Regional Offices and 35 NPDES States have issued just over 65,000 industrial and municipal permits. To issue permits to the approximately two million dams in the U.S., or even to any significant fraction of this number (such as the 50 to 60 thousand large dams), would impair the ability of EPA and the States to adequately regulate major dischargers of priority pollutants.

According to our best current estimates, merely to issue permits to the 50 to 60 thousand large dams would consume the entire EPA and State permitting resources for the next nine to fourteen years, assuming that all toxic pollutant control efforts were put aside. If hearings were held on these permits, much more time would be required.

One of the remedies suggested by the District Court decision was the use of areawide or general permits which would cover many of these dams. There are at least two potential problems which would impede the issuance of general pemits. To issue a general permit, all of the potential permittees to be covered must be similar in nature, with similar discharges. Since the problems and solutions attributable to the dam would vary depending on the dam site, a general permit containing conditions and requirements for all dams to be covered by the general permit would not be feasible.

Furthermore, even if some technical basis for general permits could be developed, most of the 35 approved NPDES States would need to obtain EPA approval to administer a general permit program prior to issuing general permits. In the meantime, the States would have to shoulder the crushing burden of issuing individual permits.

In summary, the impact of the recent court decision would be a serious misallocation of permitting resources with little environmental return. The remedy we are recommending would allow the States to identify and control problem dams in the context of their overall water quality management program.

CONCLUSION

Let me conclude my remarks by thanking you for considering our legislative recommendations. The Clean Water Act is not a new law. EPA and the Administration support the Act and will continue to implement it with vigor. We are not proposing changes that in any way alter the basic construct of the Act.

The changes we are seeking focus on recognizing the realities of the time required for the intricate implementation of the Act, increasing the efficiency of the Act's administration, increasing the flexibility of States and local governments, and clarifying points in the existing Act.

EPA will be pleased to provide additional analysis or to answer your inquiries concerning these provisions.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
POLICY AND RESOURCE MANAGEMENT

Honorable John H. Chafee
Chairman, Subcommittee on
Environmental Pollution
Committee on Environment and
Public Works
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In connection with Dr. Hernandez's testimony before your Subcommittee on July 21, 1982 concerning reauthorization of the Clean Water Act, a number of questions were submitted to the Agency requesting further information and clarification on a number of issues.

Responses to the majority of those questions have been prepared and are enclosed for your review. Responses to the remaining questions are in the final stages of development and will be submitted shortly.

If we can provide further information or respond to additional questions, please do not hesitate to contact me.

Sincerely yours,

William Prendergast
Deputy Director
Office of Congressional Liaison

Enclosures

NRDC COMMENT (Supplement page 4): The EPA proposal in section 307(b)(1) for 2 years to comply with revisions to regulations is unwarranted and could be used to delay program implementation.

EPA RESPONSE: NRDC's comment seems based upon a misreading of the statute and regulations. The pretreatment program is made up of several parts which are authorized by various sections of the Clean Water Act:

Local Program Requirements - Section 402(b)(8) - Mandates local industrial control programs to assure compliance with pretreatment standards.

State Programs - Section 402(b)(9) of the CWA and Section 54(c)(2) of the Clean Water Act Amendments of 1977 - Mandates State pretreatment programs to oversee local program development and operation, and industrial compliance.

Categorical Pretreatment Standards - Section 307(b),(c) and (d) - Requires promulgation of discharge standards applicable to specific categories of industrial dischargers.

General Prohibitions - Section 307(b) - Requires promulgation of discharge standards appicable to all nondomestic dischargers to POTWs.

The 2 year compliance deadline which EPA proposes to add to section 307(b)(1) would apply only to new or significantly revised general prohibitions. Currently, these general prohibitions regulate things like slug loads, explosives, pH and temperature. If, in the future, it is determined that new prohibitions are needed (for example, to address radioactive material or hazardous wastes), then a realistic period for dischargers to come into compliance is necessary. In fact, the 2 year proposal is significantly shorter than the 3 years allowed by the current statute. Such an addition to or change in the general prohibitions would not disrupt or delay other aspects of local program or categorical standard implementation as NRDC seems to infer.

The municipal program requirements are based on another section of the Act (402(b)(8)), have no statutory deadline and are unaffected by this modification to section 307(b). The categorical standards which are currently authorized by the same section as are the general prohibitions (307(b)) would likewise be unaffected by the 2 year deadline. EPA proposed section 307(b) be subdivided to clarify it and eliminate just this sort of confusion. Under the Administration's proposal, categorical standards would be established under section 307(b)(2) and the 2 year compliance deadline in section 307(b)(1) would not apply.

NRDC COMMENT (Supplement page 3): The proposal grants the Administrator too much discretion by allowing for revision of the general prohibition requirements "as appropriate".

EPA RESPONSE: Section 307(b)(1) is the authority for general prohibitive discharge standards not for all the 'general program requirements' as NRDC seems to imply. The proposed language for section 307(b)(1) maintains the same standards for general prohibition requirements as found in the 1972 and 1977 versions of the Clean Water Act. The Administration's language requires that the general prohibition standards be "applicable to all categories of sources" introducing pollutants into POTWs and that they be established for "those pollutants which are determined not to be susceptible to treatment by such treatment works, which may interfere with the operation of such treatment works, pass through such works, impair sludge use or disposal by such works ... or otherwise be incompatible with such works". The language NRDC is concerned about merely recognizes that extensive general prohibition regulations were promulgated subsequent to 1972 and 1977 and may have to be altered someday to accomodate new information or changed circumstances. If revisions are necessary they will still have to meet the statutory standard which the administration has been careful to preserve.

NRDC COMMENT (Analysis pp. 5-10): If EPA is given the discretion to determine which standards to issue in mandatory form, the Agency will not issue standards and the burden of controlling industrial dischargers will shift to cities who are incapable.

EPA RESPONSE: The goal of categorical standards is to reduce the discharge of toxic and other incompatible pollutants. The history of standards promulgation indicates it is a complicated, lengthy and costly process to issue a sound and defensible standard. That is the case regardless of the amount of pollutants controlled by a given standard. The Agency is not proposing to abandon categorical standards. Rather, the Administration believes the effort will be accelerated by focussing resources on the major priority industries that cause the greatest amounts of pollution problems. The Agency's program evaluation indicated there is a wide disparity in environmental benefits resulting from control of priority categories. Therefore, the Agency requests the flexibility to decide how control can most cost-effectively be achieved. NRDC's charge that the Administration is requesting this change as a means to abandon all mandatory pretreatment standards is baseless.

EPA disagrees with NRDC's assessment of POTW ability. Some POTWs have had difficulty controlling their industrial dischargers. But they are not a majority and their problems do not mean that POTWs are inherently incapable. Both the current program and as the Administration proposes to amend it are based firmly on the concept of delegation of primary responsibility to the local level. This delegation is to be directed, assisted and overseen by States and EPA. POTWs which lack certain authorities, abilities or resources will be required to develop them. Those already possessing sufficient programs need only submit program descriptions and this will be simplified if the Administration's exemption amendment is adopted.

The Clean Water Act's pretreatment provisions envision a joint effort of EPA, States and cities to control pollution from indirect dischargers. The Administration endorses this concept and is seeking changes to improve its operation and make it easier for EPA and cities to work together, both initially, to develop workable programs, and in the future to secure successful implementation and thereby achieve the goals of the Act.

NRDC COMMENT (Supplement page 4): The Agency proposal eliminates the requirement that categorical standards be technology based.

EPA RESPONSE: EPA intends that categorical pretreatment standards continue to be technology-based. They will be analogous to standards for direct dischargers. They will be developed using the same section 304 criteria. To alter the statutory technology-based approach would require changes in sections 301(b) and 304.

NRDC COMMENT (Supplement page 6): The Administration proposal gives EPA broad power to rescind existing regulations which could be used to eliminate the entire federal standard setting program.

EPA RESPONSE: The Administration is requesting the authority to rescind existing categorical standards to have the flexibility to deal with situations where standards are no longer useful. There is no intent to use this authority to eliminate the mandatory standard program through wholesale recision of existing mandatory pretreatment standards. The Administration is moving ahead expeditiously to promulgate the priority mandatory standards. There is no "hidden agenda", as NRDC is implying, to revoke these standards as soon as the CWA is amended.

NRDC COMMENT (Supplement p. 7): EPA's proposal for exemptions from local program requirements requires no evidence or demonstration and the conditions are meaningless to protect water quality.

EPA RESPONSE: The specific requirements of an adequate "certification" will be set forth in regulations. It is the Administration's intent that the certification would be less burdensome than the demonstration necessary to obtain a 301(h) waiver, but it would be more than a simple letter from the POTW declaring they are in compliance with the conditions. The certification would have to be sufficiently supported with statements indicating the basis upon which the criteria have been met. The State or EPA and the public would then have the opportunity to make an independent, informed determination on their conformance with the exemption conditions. However, enough flexibility will be allowed to account for the extensive variability in size and complexity of POTWs.

The Administration disagrees with NRDC's assessment of the value of the exemption conditions. The intent of the exemption is to free POTWs from burdensome and redundant efforts to comply with the details of the federal requirements where they have a comparable program. The conditions were chosen to make this determination of comparability. For example, the condition that the POTW have a program adequate to meet the objectives of section 402(b)(8) will be the basis for a review of the adequacy of the local standards and the compliance and enforcement program. The condition that a POTW is in compliance with secondary treatment requirements guarantees the demonstrated toxic removal ability of that technology and provides a minimal level of pollution protection. The third major condition, that there be POTW effluent limits for pollutants interfering with the receiving water, establishes a direct link to water quality. These limits will be established by the permitting authority or that authority will make a determination that such limits are unnecessary as part of its review or approval of the exemption request. NRDC's suggestions that EPA or the States will issue sham limitations or open ended compliance schedules assumes a bad faith that is unsupported by the record.

NRDC COMMENT (Supplement p. 11): EPA's proposed exemption from categorical pretreatment standards suffers from the same inadequacies as the local program exemption.

EPA RESPONSE: The Administration believes this exemption is necessary to avoid costly and duplicative treatment where a local program achieves comparable results. The conditions are appropriate and form a reasonable basis upon which to make a valid determination of the adequacy of environmental protection.

NRDC COMMENT: EPA has issued only one regulation out of over twenty that are required, and has fallen seriously behind its own schedule.

EPA RESPONSE: As of the end of July 1982, EPA has proposed 12 regulations and promulgated 3 regulations. As NRDC stated in their "Plantiffs' Reponse to Defendants' Motion for Partial Relief" filed with the United States District Court for the District of Columbia in the case of NRDC, Inc. et al. v. Gorsuch, "The Agency has demonstrated good faith, and seems to have commenced a sincere effort to run a tighter ship."

NRDC COMMENT: EPA proposed to extend its own deadline for promulgating BAT limitations until July 1, 1984, and to drop the Act's current requirement that these rules be reviewed and if necessary revised every year. This new deadline would apply to all of the industry regulations.

EPA RESPONSE: The Agency has proposed to extend the promulgation deadline until July 1, 1984 and we believe that this proposed provision is a widely accepted proposal in that it does recognize past difficulties the Agency had met with regard to the guidelines development process. On June 21, 1982 the Agency submitted its proposed schedules for promulgating these guidelines and while it is true that four of them are not expected to be promulgated until June 1984; the great majority of them (20) are expected to be promulgated prior to 1984.

It is also true that the Agency is proposing to drop the annual "review and revise" provision of section 304(b) of the Act. However, it is also true that the CWA also contains a provision in section 301(d) that the Agency is to "review and revise" BAT regulations every five years. These two sections are in conflict and believe that good public policy dictates that annual revisions are unnecessarily burdensome to the public and private sector where as the five year review process provides more certainty and the prospects for a better review process.

NRDC COMMENT: Every date in EPA's current schedule is earlier than July 1, 1984, and the plaintiffs in the litigation are not yet convinced that these delays are necessary. But even under the worst case, this new deadline could mean as much as two years delay in promulgating some of the most important regulations (e.g., Iron and Steel).

EPA RESPONSE: The iron and steel BAT effluent guideline has been promulgated. While it is true that every scheduled promulgation occurs before July 1, 1984, four are scheduled for promulgation in June, 1984. Moreover, although NRDC has not been completely satisfied with EPA actions to date, their recent response to the Agency's Motion for Partial Relief (NRDC v. Gorsuch) was quite encouraging to the Agency. For example, NRDC did not object to our proposal date of February 1983 for the Organics and Plastics regulation. Although we consider our proposed schedule optimistic, we plan to meet it as shown by the Administrator's actions in committing additional resources in 1983 to the guidelines program.

NRDC COMMENT: Given EPA's current, staggered schedule for issuing BAT regulations, the 1988 compliance deadlines makes no sense at all. EPA has promised the court that even the last regulation will be issued by June 1984 (Organic Chemicals); this suggested compliance deadlines would give that industry over four years to meet its requirements. The Iron and Steel industry, at the other end of EPA's promulgation schedule, would get over six years -- twice the usual compliance period.

EPA RESPONSE: EPA has no intention of sitting back until January 1, 1988, and then determining which facilities will be able to meet the deadline in the remaining six months of the extension. Where an industrial facility can reasonably come into compliance before 1988, it will be required to do so. In support of this, EPA had recently issued a "second round" permitting policy. This policy includes the provision that Agency permits implementing the BAT/BCT level of priority toxics control will contain compliance deadlines. For many industrial facilities, this will result in compliance well before the July 1, 1988 deadlines.

NRDC COMMENT: If the average delay is just one year, our nation's waters will receive well over 100 million pounds of toxics that otherwise would not have been discharged.

EPA RESPONSE: In accordance with EPA's "Policy for the Second Round Issuance of National Pollutant Discharge Elimination System (NPDES) Permits for Industrial Sources," first priority shall be given to industrial facilities discharging to waters where use impairment problems have been identified and where there is adequate information to develop either a water quality-based permit or a BAT/BCT permit relying on best professional judgment in the absence of effluent standards and guidelines. The remaining permit issuance priorities are: (2) to facilities for which applicable BAT/BCT effluent guidelines have been promulgated; (3) to facilities suspected of contributing to the impairment of a designated water use, but where insufficient information exists to confirm the extent of the use impairment; (4) to facilities for which effluent guidelines are not scheduled for promulgation and the existing permit limitations do not reflect treatment; and (5) the extension or reissuance of permits to facilities for which effluent guidelines are not scheduled and the existing permit requires sufficient treatment. The policy is effective immediately and will remain in effect until September 30, 1983. Based on this policy, EPA Regional Offices were asked to develop and submit by June 30, 1982, a list of priority permits which they expect to issue before the end of Fiscal Year 1983.

NRDC COMMENT: EPA's proposal would give existing sources the same period of protection as provided to new sources, and prevent EPA from imposing more stringent requirements during the term of the permit.

EPA RESPONSE: The proposed ten year permit would not provide existing source permittees with the same period of protection from permit requirements as provided new sources. Section 306 of the CWA provides that a new source receives a ten year protection from any more stringent standard of performance during a ten year period. The proposed ten year permit would not provide similar protection from more stringent requirements, such as new BAT effluent limitations guidelines, or water quality standards during the permit term.

Moreover, to incorporate in the permit any more stringent requirements, EPA will propose a revision to the NPDES permit regulations to require permitting agencies to modify permits, where applicable, based on revised effluent limitation guidelines, State water quality standards, and toxic limitations and standards which are promulgated after a permit is issued. The revision would also authorize third parties to initiate permit modifications in these situations.

It should also be pointed out that EPA's proposal extends the permit term to no more than ten years; it does not propose that all permits be issued for ten year terms. EPA and the 35 approved NPDES States would have the discretion to issue permits for five or up to ten years. Shorter term permits would often be issued for some of the major, primary industry facilities such as those in the organic chemicals and pesticides industries. EPA does expect to issue ten year permits for most minor and secondary discharges.

NRDC COMMENT: The ten year permit will not ease the permit writer's backlog, but will only postpone the workload.

EPA RESPONSE: While EPA does not expect the large backlog of expired permits to be reduced immediately, the ten year permit should diminish this backlog over the long term, and prevent future backlogs, where permit issuance occurs less frequently. Under this proposal, EPA and the States will have more time to "catch up" between permit issuance since minor and secondary permits will not have to be addressed for up to ten years.

NRDC COMMENT: EPA's proposal on Federal facilities creates a loophole in the Act's toxics control program that is not justified by any demonstrated need.

EPA RESPONSE: The Administration believes the current presidential exemption provisions are inadequate because there is no statutory authority for the President to exempt Federal facilities from the provisions of the Act for either toxic dicharges or new sources. Severe problems could arise through the lack of this authority. These are significant omissions in the current statute, as supported by the following discussion.

One major example involves two partially active and six inactive Army ammunition plants, where full-scale productions levels would be significant during mobilization. Pollution abatement controls for the two partially active plants can handle the minimal current production levels. However, during mobilization, there would be at least a 50 percent shortfall of wastewater treatment capability. The waste streams from all eight of these facilities contain both toxic and conventional pollutants. A three-year period would be required to allow sufficient time to fund adequate pollution controls, to design, and to construct them.

The impact of failing to exempt these plants and similar facilities would be severe. For example, without the exemption, the six inactive plants could be required to obtain "new source" permits, and start-up could be delayed until all pollution abatement controls were in place. This alternative would reduce the Department of Defense's (DoD) capability to produce explosives, propellants, small arms ammunition, and artillery ammunition by more than 50 percent. In addition, repair and rehabilitation of artillery pieces would be reduced by 50 percent. These severe impacts on readiness and resupply capability are unacceptable.

Water pollution controls beyond the minimal controls current[illegible]ace will not be installed until needed at the 8 Army ammunition plants because of problems in fully characterizing the site specific waste streams for those facilities in stand-by status. Until they start production, it is not possible to determine the extent and types of pollutants generated. The exact volumes, concentrations, and types of pollutants resulting from these production facilities are unknown, since these pollutants were not a known concern when these facilities were last in use. Wastewater treatment at each ammunition plant is site specific, because of differences in production processes at each plant.

NRDC COMMENT: Instead of defining dams as nonpoint sources, EPA should do something about the problems they cause by using the administrative flexibility authorized by he Court to issue individual permits, categorical exemptions, areawide permits and general permits. Defining dams as nonpoint sources would guarantee that these water quality problems are forgotten by EPA and State agencies.

EPA RESPONSE: Since there has been no comprehensive survey of dams to identify water quality problems, EPA does not have the data necessary to determine how to use the types of administrative flexibility the Court suggested. We are unable to determine the characteristics of dams that cause water-quality problems. Without these, dams cannot be screened to determine which require general or individual permits and effluent guidelines cannot be prepared.

Section 305(b) of the Act requires states to develop a biennial report which identifies and ranks their principal water quality problems, and their sources. Such reports have not identified dams as significant source of water pollution. Therefore, we question the appropriateness and the benefits of expending resources to regulate dams.

On the other hand, we believe that the State water quality management programs, which use the 305(b) reports to identify their priority water quality problems represent an efficient and effective means of identifying and addressing water quality problems which are caused by dams. EPA through its program grants and State-EPA agreements works with the States to focus State activities on priority water quality problems, whatever their source.

NRDC COMMENT: Through its regulations, EPA has turned the definition of new sources upside down. Seizing on the language "if such standard is thereafter promulgated in accordance with this section" EPA says that the proposal date no longer triggers the definition wherever the Agency misses its 120 day promulgation deadline. Since EPA always misses the deadline, new sources are now those which commence construction after promulgation, not proposal.

EPA RESPONSE: Section 306(a)(2) of the Act provides that a new source is a "source [whose] construction ... is commenced after publication of a proposed regulation prescribing a standard of performance ... which will be applicable to such source, if such standard is thereafter promulgated in accordance with this section." Section 306(b)(1)(B) provides that such standards shall be promulgated within 120 days after publication of the proposed regulations. The Agency has interpreted these two provisions together to provide that a source is only a new source if a new source performance standard (NSPS) is promulgated within 120 days.

The Third Circuit Court of Appeals, however, rejected this interpretation in Commonwealth of Pennsylvania, Department of Environmental Resources v. EPA, 618 F 2d 991 (3rd Cir. 1980). The Third Circuit's decision creates a particular hardship on facilities which commence construction in the post-proposal, pre-promulgation period, especially where a substantial amount of time elapses between proposal and promulgation.

In such situations, the facility is placed in a period of prolonged uncertainty as to what its final limitations will be. This can have disastrous consequences for the facility which installs pollution control technology on the basis of the proposed limitations but then finds that the final limitations are substantially more stringent than the proposed. The proposed amendments eliminate this problem for facilities subject to new source performance standards proposed after enactment of the Clean Water Act Amendments of 1982.

NRDC COMMENT: During the next year or two, EPA is required to issue new source standards, under the NRDC v. Gorsuch Consent Decree, for all of the primary industries. These standards will specifically address toxic pollutant dischargers from many categories of sources -- some for the first time. Every new facility for which construction commences between proposal and promulgation will escape those regulations. Given EPA's long delays thus far, a large number of plants could slip through EPA's loophole.

This proposal makes a significant step toward mortgaging the future. It stifles Congress' determination to seize the only real opportunity for wise planning decisions and truly stringent requirements based on the most innovative treatment processes available.

EPA RESPONSE: Our response to the previous NRDC comment on new source performance standards answers this comment as well. In addition, under our proposed amendment these sources would be required to meet applicable BAT/BCT guidelines for existing facilities.

NRDC CHAPTER 7

NRDC COMMENT: EPA proposes that thermal discharges merely assure attainment or maintenance of state water quality standards, in lieu of satisfying the existing standard of a "balanced indigenous population".

EPA RESPONSE: EPA proposes to allow discharge permits to be modified based on the satisfaction of either of two tests. First, that the State thermal water quality criterion (the numerical component of a State water quality standard) would be met by modified effluent limitations. We believe that State standards are sufficient to protect designated uses. This position reflects the Administration's view that pollution control requirements should be directly linked to the protection of the actual uses of the receiving waters.

Second, we would allow the discharger to demonstrate that a "balanced population" of aquatic life would be maintained. This reflects our belief that the term "indigenous" has resulted in unnecessarily stringent thermal effluent limitations. We disagree with NRDC that this term is necessary to the achievement of the objective or interim goal of the Act. The existing section 301(g) variance provision does not contain this term and the section 303 water quality standards process is based on allowing States to weigh various factors in determining the uses of each water body.

NRDC COMMENT: State standards are subjectto manipulation and downgrading. Using State standards would permit the destruction of aquatic life wherever such downgrading takes place.

EPA RESPONSE: EPA believes that section 303 appropriately allows States to weigh the costs and benefits of existing and potential water body uses. We do not agree that State standards can be manipulated, given the very open and public process that is used in their adoption and review. We do not believe that this change would result in widespread downgrading. We do believe that Congress, in requiring States to review is standards every three years, intended that there be a continuing process to tailor standards to local conditions and periodically reassess their appropriateness, given new data.

NRDC CHAPTER 7

NRDC COMMENT: EPA proposes a second floor, no dimination of water quality.

EPA RESPONSE: EPA's legislative proposal does not contain this provision.

NRDC Chapter 8

NRDC COMMENTS: NRDC has asserted that the authorized funding level for FY 83 is insufficient.

EPA RESPONSE: The Agency does not think that this is the case and has prepared detailed descriptions of what will be accomplished with the funding at this level.

Under the Administrations proposal, future authorizations would also be established through budget deliberations.

BAT WAIVER 1

QUESTION: The regulatory provisions critical to the successful implementation of the Act are effluent limitations, pretreatment, and the national permit system. The technology based approach, specifically BAT, is the cornerstone of these elements for toxics control. How then could we safely alter this cornerstone without subverting the goals of the Act?

ANSWER: We agree that BAT is the cornerstone in the provison for national toxics control, although it is also clear that the statute intends that a water quality based control system be used as a supplement to provide further toxic contols where necessary. As stated in our testimony, we do not believe that we have enough information on either what the final BAT limitations will look like or what they will accomplish, to assess the need for BAT modification provision at this time. We therefore did not recommend a modification provision for the BAT program because of our agreement with a fundamental principle set forth by the Committee, that principle being that statutory amendments should not be made unless compelling evidence exists that the current program is not working and there is substantial agreement on a modified approach.

BAT WAIVER 2

QUESTION: Alteration of the BAT for toxics control would move regulatory policy toward a more water quality oriented approach. What indications do we have that such a program, which proved to be unworkable and inadequate prior to 1972, could be effective now?

ANSWER: In regard to a BAT modification provision, as noted in my earlier testimony, it is most difficult to determine the extent and type of modification that eventually may be warranted since many of the BAT guidelines are not yet in place. Moreover, we would not recommend a modification program unless we had the scientific, administrative, and legal capacity to manage a successful program.

Several factors now make it more likely that, over time, a workable water quality based approach can be implemented for toxics. For example, we have learned quite a bit about toxicity of various pollutants and the levels and types of chemical constituents found in various types of industrial wastes. Also, the changes in the 1972 Amendments, particularly the provisions for an enforceable permit program, have been helpful as have improvements in the techniques for developing water quality based controls. In fact, we and the States have been successful in implementing a number of water quality based controls. For example, some pulp and paper mills and many POTWs have had water quality based controls (based on dissolved oxygen levels) for many years. In those cases where we are able to determine the needed level of treatment, e.g., using site-specific water quality criteria and mathematical models, we can and do implement water quality based controls. In addition, although there are advancements yet to be made in assessing toxic pollutant fate and effects, significant strides have been made. Effluent and ambient biomonitoring can aid us in setting water quality based controls and "margins of safety" can be incorporated into effluent limitations where some uncertainty remains.

BAT WAIVER 3

QUESTION: The fact that EPA has not been successful in putting forth a toxics control program has encouraged the examination of available alternatives. These alternatives may be generally classified as technology based or water quality based approaches. What are the resources involved in their implementation in relative terms?

ANSWER: EPA is committed to completing the development of the technology based effluent guidelines and estimates the total remaining cost of that effort to be $8 million. EPA believes that these controls will eliminate most toxic pollution problems and that further water quality based controls will be needed in only a limited number of areas. Until the BAT guidelines are finally developed, we cannot determine precisely how many areas will require water quality based controls for toxics. In addition, we do not know how many areas would require water quality based controls without the BAT guidelines, although we believe that the number would be substantially higher than if BAT were implemented. Overall, we believe the program costs of implementing a water quality based control approach as a substitute, rather than complement, for technology based standards would be significantly greater than the costs of implementing a technology based approach. However, final costs to the discharger may be less under the water quality based approach as to opposed to the technology based approach. The overall cost of the program for the private and public sector cannot be fully assessed until the guidelines program further progresses.

BAT WAIVER #4

QUESTION: The lack of adequate biological and toxicological data presents a major restriction on our ability to set meaningful technological and water quality standards. Would a biomonitoring provision for discharge permits provide us with the information necessary to make sound regulations in the future?

ANSWER: Requiring biomonitoring of industrial discharges would provide useful information on water quality effects. Indeed, biological and toxicological measurements are the only methods available to assess actual water quality impacts. In order to base future regulations on sound scientific principles, it is important to generate sufficient biological and toxicological data on the impact of toxic pollutants to receiving waters.

The use of biomonitoring is limited by certain considerations. The costs associated with effluent bioassays, ecological field surveys, and bioaccumulation studies can be substantial. Dischargers are often reluctant to accept such costs especially where the studies are subject to interpretation and may lead to further treatment requirements. Secondly, when a waste is toxic it is very difficult to determine the persistence of the toxicity in the receiving water. Finally, if a wastewater is causing toxicity problems, it is sometimes difficult to identify the types of pollutants causing the toxicity and determine effective treatment alternatives.

EPA and many States believe that toxicological testing of wastewaters and ecological surveys are extremely useful and, in certain cases, provide a more efficient assessment than individually identifying and testing the many chemicals that constitute the wastewater. EPA's Second Round Policy for the Issuance of NPDES Permits for Industrial Sources encourages permitting authorities to use effluent toxicity and instream effects data as a basis for water quality-based limitations. The policy also encourages the use of toxicity testing and field survey permit requirements where insufficient data exists on water quality effects. To make better use of toxicological data, EPA is developing a computer data system within STORET for effluent toxicological data (the Complex Effluent Toxicity Information System or CETIS). It is hoped that Regions and States will use the system to manage all of their biomonitoring data.

In summary, biomonitoring, although not a panacea, provides extremely useful information within the permit process which cannot be generated any other way. EPA and the States are moving toward greater use of this tool. Data is being generated either by the State itself, by asking applicants to submit additional information, or through provisions in reissued permits. The use of permit provisions will be hampered by a recent negotiated settlement in the Consolidated Permit Regulations lawsuit which discourages the use of biomonitoring. However, many States will continue to use this tool and after a few years of experience and development of a useable data base, toxicological data will provide important insights on the nature of pollution problems and lead to better regulation.

BAT WAIVER 5

QUESTION: You have indicated that we have achieved toxic reductions through biological controls that are currently in place. Has EPA assessed removal rates for specific Best Practicable Technologies (BPT) or the percentage reduction of influent toxics? In other words, do we know where we are with respect to our ultimate goal of prohibiting the discharge of "toxic pollutants in toxic amounts" without BAT?

ANSWER: EPA has assessed the effects of BPT in reducing toxic pollutant discharges and has found that these technologies can remove a high percentage of the raw wasteloads of pollutants in some industrial subcategories. For example, our analyses show that the physical/chemical treatment systems used in the ore mining indsutry for conventional pollutant removal required by BPT reduce metal loadings about 95%. Traditional biological treatment methods used by the petroleum industry reduce organic toxics such as toluene and phenols by about 95%. These removal efficiencies vary from industry to industry and pollutant to pollutant.

In general, the concentrations of a number of toxic pollutants in BPT effluents are still roughly one to two orders of magnitude higher than the EPA water quality criteria for the protection of aquatic life. Therefore, the effluents themselves are still likely to be toxic in many cases. However, where the receiving water has sufficient assimilative capacity, the discharge may not have toxic effects.

BAT WAIVER 6

QUESTION: You stated in your testimony before the House Subcommittee on Water Resources the belief that "consideration should be given to limited waivers to toxic and conventional BCT requirements whereby dischargers would be required to demonstrate that their current level of treatment provides for meeting State water quality standards". Yet you have also indicated that a problem with a water quality based control approach is the lack of valid state stream standards for toxic pollutants. How could we rely on this information for issuing waivers?

ANSWER: In our February 24th testimony to the Subcommittee on Water Resources we did indeed state that consideration should be given to limited waivers with the condition that dischargers "... demonstrate that their current level of treatment provides for meeting State water quality standards and also fully provides the necessary environmental protection." EPA's testimony to your Subcommittee indicated that we considered three sub-options as measures of achieving environmental protection. They are: the actual criteria incorporated into State water quality standards; biological integrity; and the attainment of designated uses. As you know, State water quality standards are composed of designated uses and criteria protective of those uses. Thus, meeting criteria is a surrogate for achieving designated uses. Similarly, we are committed to the Act's goal of "biological integrity." These sub-options were reviewed and, as you know, none were selected as we did not opt to recommend a BAT environmental waiver program.

The existence of toxic water quality standards is, of course, of concern in designing a possible modification program. As has been noted many times, the States do not have water quality standards for all 129 priority pollutants. The Agency has found, however, that not all 129 priority pollutants are of broad geographic concern, and therefore States will not need to adopt standards for each of these pollutants to maintain a viable standards program. The Agency has narrowed the list of priority pollutants of national concern to twelve including arsenic, cadmium, chromium, copper, cyanide, lead, silver, mercury, PCB's, phenols, 2,4,6, trichlorophenol, and phthalate esters. Without these standards, the States could still make some decisions on the basis of biological testing and use attainment. In addition, all States have narrative prohibitions against toxic substances in toxic amounts in their state standards. Thus, even where states do not have numeric criteria for toxics they still have an in-place mechanism to control toxics through their water quality standards program.

QUESTION: There seems to be a contradiction throughout your testimony where you say EPA will avoid treatment for treatment's sake and elsewhere you talk about the paucity of data dealing with toxics. Therefore, how would we know when BAT is treatment for treatment's sake?

ANSWER: In the process of developing the BAT effluent guidelines, EPA has collected an enormous amount of data to define the levels of toxic pollutants in all types of industrial discharges. We are carefully reviewing this data to ensure that we establish more stringent BAT controls only for those industry categories and subcategories when substantial amounts of toxic pollutants are still being discharged. Thus we are avoiding treatment for treatment's sake on an industry subcategory basis. However, it is quite possible that certain individual facilities within a subcategory which EPA has decided to regulate are not themselves causing water quality problems. We are attempting to minimize these situations through precise definition of industry subcategories and segments. For example, of the 58 segments we defined in the iron and steel industry, 41 will not be required to install treatment more stringent than BPT.

The area where we are now working hard to expand our information base is in developing accurate descriptions of how different discharge levels, especially toxics, affect the beneficial uses of a stream segment. Our information base on the fate and effect of toxic pollutants on stream beneficial uses can be expanded through ambient chemical, physical and biomonitoring as well as effluent toxicity testing.

QUESTION: Under a BAT waiver, could each one be subject to a legal challenge? How would the waiver work on a complex stream system? Wouldn't there be a fairness problem with who gets waivers and who doesn't?

ANSWER: Each permitting decision would be subject to a legal challenge under a BAT modification program. In this regard, permits written under waiver provisions would be no different than any other water quality based permit decision.

As you know, industry tends to concentrate in metropolitan areas and consequently BAT industries tend to be located in clusters, or multi-discharge reaches. Thus, there will be many situations in which complex systems would be involved. The workings of the environmental modification system on a complex river system would depend on the benchmark tests which were to be devised. Certainly, the environmental modification tests would include some provision that environmental objectives are or could be achieved. Permitting authorities would probably require effluent and ambient monitoring of the discharger's effluent on the chemical, physical and biological integrity of the river system. In all probability, the testing procedures would prescribe effluent toxicity testing as will as ambient biomonitoring.

In our deliberations over a BAT waiver program, we encountered the "fairness" question from many sides and it became a central issue in defining our options. Industrial groups, for instance, questioned why they should be subject to BAT on stream reaches where secondary treatment has not been achieved [illegible] alities and non-point sources continue unabated. The non-pred[illegible]tion is one method to get at the fairness question. Either the stream segment achieves environmental objectives currently and all dischargers are eligible for waivers, or environmental objectives is not achieved and no one on the segment is eligible. This is "unfair" in that a "clean" facility would not get a waiver if a neighboring source caused water quality problems, but it is "fair" in that everyone understands the rules beforehand and "assessing the blame" arguments become irrelevant. Another issue that should be considered in the context of equity is the ability to generate sufficient data and present it in a convincing fashion. In this regard, the larger discharger is in a much better position to provide good data than the small discharger. This has been the Agency's experience in the 301(h) program. We believe, however, that this bias can be largely mitigated as all dischargers would likely coordinate their application for waiver eligibility.

BAT WAIVER 9

QUESTION: The Chemical Manufacturers Association has produced a report that provides data indicating that combined physical, chemical, and biological treatment processes achieve significant reduction of toxics within five specific chemical plants. What was the purpose of this study from EPA's perspective? What conclusions, if any, can be drawn from this report on the effectiveness of select treatment systems in toxics control? As far as EPA is concerned, are these 5 plants representative of the chemical industry in general?

ANSWER: The purpose of this study was intended to complement short term data taken earlier at a relatively large number of plants by measuring the long term effectiveness and variability of well designed and operated treatment systems which incorporated biological treatment. The five plants included in this study actually had treatment systems with a variety of complementary physical/chemical treatment preceding (or following) biological treatment. Thus, the final effluent concentrations of priority pollutants reflect the effect of the total treatment systems, as well as some controls within the production processes themselves, and not simply biological treatment. While the treatment systems at these plants appear, on the basis of CMA's analysis, to have demonstrated substantial reduction of certain organic priority pollutants, their design and operation is not necessarily representative of the industry. Treatment systems at many other plants would undoubtedly require improvement to be equally effective. EPA has not yet completed an analysis of the five plant data, or of other data that the Agency intends to use in support of BAT standards for this industry.

BAT REGULATION 1

QUESTION: Could you describe for the Committee the NRDC consent decree?

ANSWER: The absence of an effective toxics strategy under the 1972 Clean Water Act resulted in litigation against EPA by the Natural Resources Defense Council (NRDC). In the process of settlement, EPA had NRDC developed an overall policy which focuses all of the regulatory mechanisms provided by the 1972 Act upon the primary objective of effectively regulating the discharge of toxic or priority pollutants. In developing this policy, the parties identified the pollutants which would be the primary subject of regulation, the industries which would be of primary concern in applying the regulations, and the methodology for applying the regulatory tools which the Act provides pursuant to an overall toxics-oriented strategy. The agreements reached in these negotiations were embodied in a settlement decree in the case [NRDC v. Train, 8 E.R.C. 2120 (D.D.C. 1976) modified 12 ERC 1833 (1979)] and that Decree has become the framework for a toxics strategy under the Clean Water Act. Pursuant to this Decree, EPA developed a program to regulate 65 categories of "priority pollutants" which have been further categorized into 129 chemical substances. EPA has conducted studies of 21 industrial categories (which cover approximately 700 industrial subcategories) in accordance with the Decree.

The most important part of the Decree requires adoption of best available technology (BAT) effluent limitations for each priority pollutant in each industrial category, unless the pollutant or category (or subcategory) could be exluded under Paragraph 8 of the Decree. Similar technology-oriented requirements must be adopted for new sources and sources discharging into publicly owned treatment works (POTW). A category could be excluded from regulation under the Decree (Paragraph 8 of the Decree) if, for example, equivalent or greater protection is already provided by a presently effective effluent limitation, the specific pollutant in question is present in the industry effluent only by reason of the pollutant's presence in intake waters, or the pollutant is either not present in the industry discharge or is present only in trace amounts not likely to cause toxic effects, or if the amount and toxicity of each pollutant do not justify developing national regulations.

In addition to this new, focused set of industry-by-industry effluent limitations and standards,the Consent Decree addresses a post-technology based program to identify pollutants and areas which may require more stringent controls. It also required the Agency to develop an implementation strategy.

Other Consent Decree requirements include: provisions to identify toxic pollutants, other than the 129, which interfere with the efficient operation of POTWs and the implementation of a program to control these pollutants; and the development of water quality criteria for the priority pollutants.

BAT REGULATION 2

QUESTION: What is the new schedule for establishing guidelines?

ANSWER: The new Agency proposed schedule for establishing guidelines is shown in Attachment A.

ATTACHMENT A

EFFLUENT STANDARDS AND GUIDELINES
PROPOSAL AND PROMULGATION SCHEDULE
CHRONOLOGICAL LISTING OF PROPOSALS AND PROMULGATIONS
July 7, 1982

Industry	Proposal Date*	Promulgation Date*
Electric and Electronic Components (Phase I)	8/82	
Metal Finishing	8/82	
Textile Mills		8/82
Coal Mining		9/82
Petroleum Refining		9/82
Battery Manufacturing	10/82	
Copper Forming	10/82	
Foundries	10/82	
Pulp and Paper		10/82
Aluminum Forming	11/82	
Coil Coating (Phase I)		11/82
Leather Tanning and Finishing		11/82
Ore Mining		11/82
Pesticides	11/82	
Pharmaceuticals	11/82	
Porcelain Enameling		11/82
Steam Electric		11/82
Coil Coating (Canmaking Segment)	1/83	
Nonferrous Metals (Phase I)	1/83	
Adhesives and Sealants	2/83	
Electric and Electronic Components (Phase II)	2/83	
Organic Chemicals	2/83	
Plastics and Synthetic Materials	2/83	
Electric and Electronic Components (Phase I)		3/83
Battery Manufacturing		6/83
Metal Finishing		6/83
Aluminum Forming		7/83
Copper Forming		7/83
Foundries		8/83
Inorganic Chemicals (Phase II)	9/83	
Nonferrous Metals (Phase II)	9/83	
Nonferrous Metals Forming	9/83	
Pharmaceuticals		9/83

ATTACHMENT A

EFFLUENT STANDARDS AND GUIDELINES
PROPOSAL AND PROMULGATION SCHEDULE
CHRONOLOGICAL LISTING OF PROPOSALS AND PROMULGATIONS
(Continued)
July 7, 1982

Industry	Proposal Date*	Promulgation Date*
Coil Coating (Canmaking Segment)		10/83
Plastics Molding and Forming	10/83	
Adhesives and Sealants		11/83
Electric and Electronic Components (Phase II)		11/83
Pesticides		12/83
Nonferrous Metals (Phase I)		1/84
Organic Chemicals		3/84
Plastics and Synthetic Materials		3/84
Inorganic Chemicals (Phase II)		6/84
Nonferrous Metals (Phase II)		6/84
Nonferrous Metals Forming		6/84
Plastics Molding and Forming		6/84

* Date signed by the Administrator

BAT REGULATION 3

QUESTION: Does this mean that EPA has all the resources to get regulations out next year?

ANSWER: The Administrator has accorded the guidelines program the highest priority within the Agency to ensure that financial and personnel resources are available to get the regulations out. In our recent affidavit to the District Court, we detailed our efforts in providing sufficient resources to the program. This included both internal and transfer reassignments of personnel and an additional $1.6 million allocated to industries covered by the Consent Decree. In addition, the Agency estimates another $3.06 million will be necessary to fund contractor studies in industrial categories for which the Agency did not previously have schedules, $1 million of which will be provided in FY 1982. Steps are being taken to allocate the remaining $2.06 million in FY 83 from FY 1982 carryover funds. These funds will be allocated to the program upon approval by the House and Senate Appropriation Committees.

BAT REGULATION 4

QUESTION: What do these regulations cover?

ANSWER: Regulations written pursuant to the NRDC Consent Decree will cover best available technology (BAT), new source performance standards (NSPS), and pretreatment standards for new and existing indirect dischargers regulating the discharge of toxic and nonconventional pollutants for the following industries.

Adhesives and Sealants
Aluminum Forming
Battery Manufacturing
Coal Mining
Coil Coating
Copper Forming
Electric and Electronic Components
Foundries
Inorganic Chemicals
Iron and Steel Manufacturing
Leather Tanning and Finishing
Metal Finishing
Nonferrous Metal
Nonferrous Metals Forming
Ore Mining
Organic Chemicals
Pesticides
Petroleum Refining
Pharamaceuticals
Plastics and Synthetic Materials
Plastics Molding and Forming
Porcelain Enameling
Pulp and Paper
Steam Electric
Textile Mills
Timber Products Processing

BAT REGULATION 5

QUESTION: If Congress did nothing this year, would a toxic control program be established by next year?

ANSWER: The Agency has been charged with running a toxics control program by Congress. The cornerstone of this control program is BAT technology based controls. The Agency projects that BAT guidelines written pursuant to the Decree will be completed in June, 1984.

BAT REGULATION 6

QUESTION: By extending the compliance deadline until 1988 aren't you asking Congress for more latitude in setting regulations than you have told the Court you need?

ANSWER: The compliance deadline should allow industry with enough lead time to install required treatment technologies. The extension in compliance deadlines parallels the necessary modification of the Agency effluent standards and guidelines promulgation dates and corresponds as well to the extended municipal secondary treatment compliance date of 1988 set by Congress in last year's amendments to the Clean Water Act.

In urging this extension, EPA emphasizes the actual legislative language: "no later than July 1, 1988." EPA has no intention of sitting back until January 1, 1988, and then determining which facilities will be able to meet the deadlines in the remaining six months of the extension.

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QUESTION: Doesn't the consent decree form the basis for the changes in compliance deadlines?

ANSWER: The Consent Decree primarily concerns promulgation schedules and not compliance deadlines. The Consent Decree does cite the same compliance deadline, July 1984, as the Act.

The promulgation deadline and compliance deadline are two separate, but related, issues. That is, we cannot expect for industry to comply with national regulations unless they are given a reasonable amount of time after guidelines promulgation to construct the necessary treatment facilities and come into compliance with standards.

In urging this extension, EPA emphasizes that actual legislative language: "no later than July 1 1988." EPA has no intention of sitting back until January 1, 1988, and then determining which facilities will be able to meet the deadlines in the remaining six months of the extension. Where an industrial facility can reasonably come into compliance before 1988, it will be required to do so. In support of this, EPA has recently issued a "second round" permitting policy to ensure that Agency permits implementing the BAT/BCT level of toxics control will contain compliance deadlines. For many industrial facilities, this will result in compliance well before the July 1, 1988 deadline.

QUESTION: In looking over your proposal I am concerned about the discretion the Administrator has with respect to promulgating categorical pretreatment standards. Why should this discretion be granted? Does this discretionary language contradict the provisions of the consent decree whereby EPA has agreed to promulgate categorical pretreatment standards on a specific schedule?

ANSWER: Pursuant to the Clean Water Act of 1977, EPA was required to promulgate effluent standards for industrial dischargers to municipal collection systems. The selection of industries was based on the concern that they were major dischargers of toxic pollutants. The list of toxic pollutants that included 65 classes of chemicals, which was subdivided to include 129 specific elements and compounds, was developed in 1976 and included in the 1976 NRDC/EPA Consent Decree. The list of toxic pollutants was included by reference in section 307(a)(1) of the Clean Water Act of 1977. The Agency developed sampling and chemical analysis procedures for the toxic pollutants by early 1978 and initiated intense studies to determine the presence and amounts of these toxic pollutants in industrial and municipal wastewaters.

The majority of the sampling and analysis studies are completed. Part of these studies were summarized in the report titled "Assessment of the Impacts of Industrial Discharges on Publicly Owned Treatment Works". The amounts of heavy metals and toxic organics discharged by 22 industrial categories to municipal collection systems with no pretreatment, current pretreatment and federally required categorical standards are presented in Table 1. The information shows a wide range in amounts of toxics discharged annually by the 22 industrial categories and significant reductions of these toxics are being done through local pretreatment programs (65% of the heavy metals and 37% of the organics). Since ninety-five percent of the heavy metals are currently discharged by only nine industrial categories, the promulgation of all categorical standards will produce marginal reductions in the total discharge of toxic pollutants.

When presented with this information the Agency determined that greater discretion should be provided in the promulgation of categorical standards and that this discretion could only be provided by the Congress through amendments to the Clean Water Act.

Amendments to the Clean Water Act to allow greater discretion in promulgation of categorical standards would not automatically result in modifications to the NRDC/EPA Consent Decree. If Congress acts to amend the Clean Water Act, the Agency would have to go back to the court to seek modification to the consent decree.

TABLE 1 INDIRECT DISCHARGE, POUNDS PER YEAR

Industry Category	Number of plants	Total Toxic Metals Current.	Total Toxic Organics Current
Metal Finishing/ Electroplating	10,200	32,000,000	26,000,000
Iron and Steel	96	3,100,000	7,200,000
Leather Tanning	140	5,700,000	580,000
Aluminum Forming	59	4,300,000	210
Pulp, Paper, Paperboard	250	3,800,000	1,000,000
Inorganic I & II	44	1,400,000	--
Porcelain Enameling	89	1,300,000	--
Copper Forming	32	970,000	--
Organics & Plastics	470	710,000	150,000,000
Textiles	930	580,000	1,050,000
Petroleum Refining	53	530,000	2,000,000
Foundries	360	330,000	60,000
Coil Coating	32	210,000	[illegible]
Electrical	240	160,000	[illegible]
Battery	190	150,000	90,000
Non Ferrous	63	130,000	630
Paint	770	130,000	40,000
Steam & Electric	93	20,000	--
Pesticides	38	16,000	240,000
Timber	47	6,200	45,000
Ink	220	1,900	1,300
Pharmaceuticals	270	--	--
TOTALS	14,686	56,000,000	190,000,000

Loadings are estimation of pounds discharged into sewers prior to treatment at the POTW.

PRETREATMENT QUESTION 2

QUESTION: Even if the Administration decides to promulgate categorical standards, your proposal, as I read it, would not require that they be technology-based -- a radicial departure from the Act.

- o What would categorical standards -- assuming the Administrator decided to promulgate some in the first place -- be based on?

- o How does this provision coincide with the Agency's mandated support of a technology-based approach to toxics control?

ANSWER: EPA supports the technology-based approach to toxics control and agrees that national categorical pretreatment standards for toxic pollutants should continue to be analogous to effluent guidelines for direct dischargers. That is, categorical standards should continue to reflect the same factors that are used to develop the Best Available Technology Economically Achieveable effluent guidelines; i.e., the factors specified in section 304(b)(2) of the Act.

EPA's intent in drafting our legislative proposals was that national categorical pretreatment standards should continue to be technology-based standards. As a practical matter, these standards will continue to be developed simultaneously with BATEA effluent guidelines and section 306 new source performance standards. We agree that the requirement that these be technology-based standards could be more clearly stated than we have in our proposed language.

Pretreatment Question #3

QUESTION: Section 7(a)(5) and (6) of EPA's legislative proposal specifies conditions under which local POTWs and indirect industrial dischargers may be exempt from the requirements of the Federal pretreatment program (both the general and categorical requirements).

(a) Please outline the proposed exemption process.

(b) What are the water quality advantages of shifting responsibility for toxics control to local government?

(c) How could the Federal government be certain that national water quality goals would be met by diffusing regulatory responsibility?

(d) What do you mean by "certification" - a statement by the POTW or a demonstration that it can meet the conditions.

ANSWER: (a) Once the CWA is amended to allow pretreatment exemptions, it should take the Agency approximately 18 months to develop and promulgate implementing regulations. A POTW would have up to 270 days from the date the regulations are promulgated to request a local program exemption. In the case of a categorical standard exemption, the request would have to be made within 3 years of the CWA amendments for standards currently in effect or 2 years after the promulgation of subsequent standards. The POTW request would certify that they met the conditions set forth in section 307(b)(5)(A) and/or (B) of the bill. When an exemption request is received, the Agency or State would review it and provide an opportunity for a public hearing before granting or rejecting the application. If a State is processing the exemption request, the Administrator is allowed 90 days for review.

(b) There are several reasons why water quality will be more effectively protected when primary responsibility for toxics control rests with local government:
- Cost effective and successful pollution control requires a degree of local knowledge and familiarity with specific local conditions - treatment capability of the POTW; specific industrial contributions; local water quality requirements - that can best be provided by local government.
- Local communities bear the impact of impaired POTW operations and water quality and therefore have the most direct interest in requiring effective toxics control.

(c) Under this proposal the Federal government would not relinquish its role in ascertaining the attainment of national water quality goals. The proposal simply allows increased flexiblity for local governments only where a local certification indicates there is comparable protection. The Federal government would retain an oversight role through monitoring of compliance with the POTWs NPDES permit, review of State water quality standards and an annual POTW report.

(d) The specific requirements of an adequate "certification" would be set forth in regulations. However, it is the Administration's intent that the certification would be less burdensome than the demonstration necessary to obtain a §301(h) waiver, but would be more than a simple letter from the POTW declaring they are in compliance with the conditions. The certification would have to be sufficiently supported with statements indicating the basis on which the criteria have been met to enable the State or EPA and the public to make an independent, informed determination on their conformance with exemption conditions. This certification will include data collected from both ambient and effluent biomonitoring Enough flexibility will be allowed to account for the extensive variability in size and complexity of POTWs.

Pretreatment Ouestion #4

QUESTION: (a) Under the provisions of your proposal for local regulatory control, how would industry's pretreatment requiements be established?

(b) Would the NPDES permit be the key mechanism for toxics control?

(c) Do permits issued by POTW's currently have parameters for control of the 65 priority toxic pollutants?

ANSWERS: (a) When a POTW qualifies for exemptions under the Agency proposal it will be responsible for establishing pretreatment requirements for its industrial dischargers. In most cases a POTW will establish a single effluent limit applicable to all nondomestic users for each pollutant it regulates. The pollutants regulated usually are those for which extensive data exists concerning potential interference effects on the POTW (i.e., the heavy metals). Even if a local program exemption is granted, national categorical standards remain directly enforceable by the States and EPA unless the POTW has also obtained an exemption from them.

(b) In addition to the local pretreatment program, the NPDES permit would be an increasingly important mechanism for toxics control. Currently few toxics are limited in POTW NPDES permits. However, in certain circumstances, when there is a serious problem with the discharge of toxic pollutants from a facilty it may cause the POTW to violate its permit limits for BOD and TSS. This alerts the State or EPA to investigate further. The importance of the permit will increase as more toxic discharge limits are added to municipal permits based on State water quality standards. In order for a POTW to receive an exemption a permit must contain all effluent limitations, including toxic pollutant effluent limitations, which are necessary to protect designated uses of the receiving waters. POTW exemptions may be withdrawn if permit limits are violated.

(c) Some POTWs with local pretreatment programs issue permits specifying toxic pollutant limits. More common, however, is for a POTW to set limits in its municipal sewer ordinance for a handful of toxics. That control may be implemented simply by regulation or by permit, contract or agreement.

PRETREATMENT 5

QUESTION: One of the conditions a POTW must meet to be exempt from the program requires that effluent limitations exist for the treatment works--or there is a commitment to establish such limitations for any pollutant which passes through the treatment works in quantities sufficient to interfere with the attainment or maintenance of designated uses of the receiving waters and that the POTW is in compliance or on schedule to comply with the limitations.

In the final analysis, you are relying on state designated uses for water quality protection.

- How are designated uses sufficient protection if you don't have toxic parameters in your permit?

ANSWER: We agree with your concerns that a designated use may not assure sufficent protection and therefore our proposed amendments specify that an exemption from pretreatment standards will not be granted if the POTW permit does not include toxic parameters.

We realize that few state standards have specific numerical toxic limitations but the majority have narrative guidelines prohibiting the discharge of any toxic that would cause an environmental problem. These narrative guidelines enable the permitting authority to include specific toxic limitations in POTW permits. Furthermore, we are encouraging the states to develop specific numerical standards and when these standards are developed, it will be straightfoward for the permitting authority to insert the limitations into the POTW permit.

PRETREATMENT 6

QUESTION: Under your proposal, would not program compliance be conditioned on the effluent concentration from the municipal plant rather than influent concentration from industrial dischargers?

- Doesn't this represent a clear movement toward a water quality based approach to toxics control?

- How could this approach be successful when our knowledge of the water quality effects of toxics is so limited?

ANSWER: POTW effluent concentrations to assure attainment of the designated uses is only one condition of program compliance under our proposed amendments. The proposed exemption process is built around the judgement of whether or not the local program accomplishes similar goals of the program required under the current statute. Protection of the receiving water is but one part of the determination that the local program accomplishes similar goals. The other conditions include compliance with secondary treatment requirements, an adequate sludge disposal program, protection of the plant, an appropriate monitoring program, adequate legal authority and a submission of an annual report.

We recognize the limitations in our ability to quantify the fate and effect of toxic water pollution, and we are committed to improving these techniques. The limitations however, need not handicap our efforts in providing for program flexibility. All of the States have narrative prohibitions against toxic pollutants in toxic amounts in their state standards. If the POTW's permit does not contain numerical effluent standards for all pollutants which may adversely affect desgniated uses, an exemption may not be granted.

Pretreatment Question #7

QUESTION: Another exemption condition requires the POTW to have adequate legal, financial, technical, analytical, administrative and enforcement authority to ensure the successful operation of a pretreatment program.

(a) Would you elaborate on this condition?

(b) Many municipalities have had problems running plants properly and running a complicated pretreatment program should require more than just having the "authority" to do so. Don't you agree?

(c) What do you mean by "adequate" and "successful"

ANSWER: (a) & (b) The language you refer to in §307(b)(5)(A)(v) should be read together with §307(b)(5)(A)(i). These two conditions are intended to ensure a POTW program has adequate legal authority, administrative procedures, pollutant limitations, compliance requirements, and financial and personnel resources. There was no intent that "authority" alone would be sufficient. The local program exemption is aimed at relieving POTWs of complying with the specific details of the pretreatment regulations when they have a comparable substitute in place. The exemption will only be approved when the local program is satisfactory in application as well as form.

(c) The "adequacy" of the elements of a local pretreatment program is very case specific. A program will be "successful" if it protects the POTW from interference, and protects the receiving water and municipal sludge from contamination. For a small facility with few industrial contributors only limited resources and minor revisions of their authority and procedures may be necessary. A large municipality will require more personnel, and more extensive requirements and procedures. Specific determinations on adequacy are best left to the reviewing office which is able to examine the actual program description in light of their knowledge of the POTW.

PRETREATMENT QUESTION 8

QUESTION: Another exemption condition requires the POTW to meet section 405 sludge guidelines, but there are no guidelines. The EPA is years behind schedule with them. When can we expect some movement in this area? Is it safe to assume that a POTW could not get out of the program if guidelines are not promulgated?

ANSWER: The Agency has formed an Intra-Agency Sludge Policy Committee charged with the oversight of the preparation of the section 405 guidelines. A Task Force has been formed to conduct the staff work attendent to such an undertaking. A tentative work plan has been prepared showing that the preparation of guidelines will be completed in FY 83. This timetable should allow time for the use of these guidelines in conjunction with the decisions that the legislative proposals would permit, under certain circumstances, to be made at the State and local levels.

The guidelines under section 405 will provide a reasonable basis to determine how disposal and reuse options are affected by changes in sludge quality resulting from pretreatment. Many sludge disposal systems are now covered by regulations isssued under other sections of the Clean Water Act, RCRA and the Clean Air Act. The absence of section 405 guidelines may cause some continuing concern for the use of certain disposal and reuse systems, but will not constitute a reason to deny greater freedom to local governments in their pretreatment decisions.

PRETREATMENT QUESTION 9

QUESTION: EPA has issued four of the thirty-four industry categorical standards for pretreatment. Eight more are expected to be issued in December. Your proposal allows the EPA Administrator to rescind these standards if they are "no longer reasonable or necessary." I am concerned about this broad new authority, especially when it is coupled with other discretionary language.

- o Under what conditions would pretreatment regulations issued by EPA no longer be necessary or reasonable?

- o What regulatory benefits would be gained by this provision?

ANSWER: First, I must correct one of your statements. EPA has issued 11 categorical pretreatment standards. In addition to the recent standards promulgated in accordance with Paragraph 7 of the Consent Decree, EPA previously promulgated 8 categorical pretreatment standards under Paragraph 13 of the Consent Decree.

We have discussed the need for discretion in an earlier question. It is important to realize that the absence of pretreatment standards for some industries does not mean there would be no control of toxic discharges by these industries. Local pretreatment authorities would continue to regulate these industries. Furthermore, our amendments retain nationally enforceable prohibited discharge standards. These are generic standards for all industries to protect the POTW, receiving water and sludge.

The Agency is presently considering some combination of four potential review criteria to be used in the definition of the need for, and stringency of, national categorical pretreatment standards: national mass loadings, the levels of treatment in place, the toxicity of the discharge and the economic impact to industry.

The regulatory benefits that would be gained is that our amendments would allow local controls that have been effective to continue. In those cases where POTW protection, water quality and cost-effective sludge disposal methodology are assured, the local POTW, through its sewer ordinance, can provide the most cost-effective approach.

PRETREATMENT QUESTION #10

QUESTION: In your prepared statement you say 80% of the large POTW's and 39% of the small ones have made substantial progress in adopting pretreatment programs.

(a) How many of these actually have programs in place?

(b) How many POTWs are lacking pretreatment programs?

ANSWER: (a) & (b) EPA estimates that approximately 2,000 of the 16,000 POTWs will require local pretreatment programs. To date, approximately 50 cities have had their formal program applications approved. A comparable number are being processed by States or EPA. An undetermined number of POTWs have their own industrial control programs in place, but it is unclear how many of these meet federal requirements without modification. The figures in the prepared statement were derived from submissions pursuant to permit compliance schedules of interim program elements for review by EPA and States.

PRETREATMENT 11

QUESTION: In your prepared text you have stated that well-run POTWs do a good job in removing many toxics and heavy metals (page 59 and table on page 60).

- o How did you arrive at this conclusion?
- o To what extent is your removal data significant in view of the high dilution that occurs at POTWs?
- o Do you believe sufficient monitoring techniques exist to account for high dilution ratios?
- o How would you address the dilution question in POTWs that experience problems with combined sewer overflows?

ANSWER: The statement that well-run POTWs do a good job in removing toxics is based on a number of Agency studies, including the 40 city study, where toxic pollutants were measured in the influent and effluent of actual POTWs. The measurements were taken after the industrial wastes were combined and diluted with domestic wastes. The removal rates listed in the table on page 60 in the testimony are median removal from the 40 city study. In other words one half of the 40 cities operate at removal rates that are greater than the rates listed in the table.

In calculating these removal rates we used conservative assumptions to interpret toxic measurements when the measurements were near the limits of detectability. Specifically when the effluent measurements were below the detection limit we assumed that the actual effluent concentration was equal to that limit. If we would have set the effluent concentration at less than the detection limit, our estimates of removal rates would have been significantly higher. Therefore, our procedures used in generating the table on page 60 assure a conservative estimate of POTW removal.

We have come a long way in improving our capabilities of measuring toxics in low concentrations. Innovations in sampling and analysis techniques have reduced costs from $3,500 to $1,000 per sample. While we acknowledge our limitations in measuring the fate and effect of toxics in the receiving waters, we believe that adequate monitoring procedures exist to identify potential toxic problems in municipal wastewaters. The limits of detection for the toxic pollutants in municipal wastewaters are sufficient to allow a determination of water quality criteria exceedances with known wastewater/stream dilution ratios.

As the final part of the POTW Toxic Study, the Agency initiated the Combined Sewer Overflow Study in 1981. Combined sewers are being sampled under dry and wet weather conditions to determine the amounts of toxic pollutants that are being by-passed to the receiving waters under wet weather conditions. Based on earlier studies we feel we have determined the portions of the toxic pollutants that enter municipal collection systems from domestic and non-domestic (industrial) sources. Our concern with combined sewers is the possibility of deposition of toxic pollutants under dry weather conditions which are flushed from the sewer and the runoff of toxic pollutants into the sewer under wet weather conditions. Sampling procedures are aimed at determining the "first flush" and the dilution of the pollutants which are anticipated to follow. Preliminary results indicate that concentrations of many of the toxic pollutants are sufficient to determine the "first flush" effect. The Agency believes that sufficient information will be available (flows and background levels) to determine the impact of toxic pollutants in combined sewer overflows even though final dilution will drive the toxic pollutant concentration below the limits of detection.

STANDARDS 1

QUESTION: Several places in your suggested amendments you discuss the control factor in sources as the impairment of a designated use. Isn't this a movement toward a water quality based program?

ANSWER: The Clean Water Act provides for a two tiered approach to water pollution control: technology based and water quality based. The water quality based approach is to serve as a supplement to technology based controls where necessary. However, the 1977 CWA also makes provisions in sections 301(g) and 301(h) for the substitution of water quality based controls after some minimum level of technology based control has been achieved. For example, section 301(g) allows for nonconventional pollutant BAT waivers upon the showing of meeting certain environmental objectives and the achievement of BAT for toxic pollutant control.

We are proposing two amendments, thermal waivers and pretreatment, which discuss the achievement of designated uses. The thermal waiver provision provided for in the 1977 CWA already makes reference to modifications of requirements based on environmental factors. While it is true we are proposing a different environmental test, we are not proposing to modify the 1977 CWA's approach. Our proposed pretreatment amendment does provide for an environmental modification opportunity that does not exist in the 1977 CWA, but this proposed amendment is consistent with current environmental modification provisions. That is, after the achievement of some minimum level of technology-based treatment, in this case secondary treatment, an opportunity is given the discharger to apply for an environmental modification. In the case of pretreatment more stringent controls may be required of indirect dischargers through local programs.

STANDARDS 2

QUESTION: The 1972 Act was written because standards based on use attainability were a failure. Why would they work now?

ANSWER: Due in large part to the changes made by the 1972 Amendments, and improvement in the techniques for developing water quality based controls, we believe that the water-quality based approach is working now, at least for some pollutants and some receiving waters. For example, some pulp and paper mills and many POTWs have had water quality based controls (based on dissolved oxygen levels) for many years. In those cases where we and the States are able to predict the needed level of treatment, e.g., using site-specific water quality criteria and mathematical models, we can and do implement water quality based controls.

STANDARDS 3

QUESTION: You state in your testimony that you don't understand fully the impact of toxics on water quality. How could you determine if a use is being impaired without this information?

ANSWER: In those cases where our knowledge is imperfect on the fates and effects of toxic pollutants on the aquatic ecosystem we will ensure that toxic effluent limitations incorporate appropriate margins of safety. In addition, ambient monitoring methods will be used to measure the impact of discharges on the ecosystem. In assessing the impairment of an aquatic life use, we believe that biological surveys will be useful in determining the effect, if any, of discharges on the local biological community. Also, for many pollutants, we are able to determine the degree to which pollutants are being accumulated in the resident organisms.

STANDARDS 4

QUESTION: The goal of the Act is to achieve fishable, swimmable waters. Shouldn't the minimum level of use be in accordance with that goal?

ANSWER: The goal of the Act is to attain fishable, swimmable waters "where attainable." This is a laudable goal and the Agency and the States have been extremely conscious of that goal in setting water quality standards. As you are probably aware, the great majority of surface waters in the United States are designated as fishable/swimmable. However, you should recognize that fishable/swimmable is not a uniform designation. Rather, it encompasses a range of use designations including warm-water and cold-water fisheries, fish passage, and put-and-take fisheries.

Section 303(c)(2) is supportive of defining a range of use designations. In that section, the Act accords the States flexibility in designating standards for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other purposes. We believe that this latitude should be encouraged within bounds and that the provision that modifications may be issued given use attainment is consistent with the Act's intent.

DAMS QUESTION 1

QUESTION: Would you describe the District Court Decision affecting dams that is raised in your proposal?

ANSWER: On January 29, 1982, Judge Joyce Green rendered a decision in National Wilidlife Federation v. Gorsuch, No. 79-0915, the litigation addressing whether certain pollution problems under section 402 of the Clean Water Act. In a sweeping opinion, Judge Green rejected EPA's longstanding position that dams do not generally "discharge pollutants" to navigable waters.1/

Judge Green gave a very expansive interpretation to the NPDES program. First, she concluded that Congress intended that the NPDES program have the broadest coverage feasible. In her view, the only legitimate basis for eliminating major pollution sources from the NPDES regulatory program is the infeasibility of applying effluent limitations to the sources through a permit program. Second, she concluded that the list of pollutants in section 502(6) was not an exclusive list of the kinds of pollutants that could be subject to NPDES jurisdiction. Third, she concluded that a dam is not simply a physical structure that impounds water. Instead, the court accepted the plaintiffs's position that the discharge is from the "dam/reservior facility", which includes the stretch of river above the dam that can be viewed as the dam's reservior. Under this theory the dam operator is responsible for pollution arising in the reservoir when it passes through the dam in the same way that a plant operator is responsible for the pollution that occurs to water passing through his plant.

Based upon these conclusions, Judge Green ordered EPA to: (1) designate dams as a point source category under the Clean Water Act; (2) establish effluent limits or other performance standards for dams on a categorical basis; and (3) subject new and existing dams to the NPDES permit requirements otherwise applicable to other point sources. The Administrator was directed to issue the required regulations within 90 days.

EPA has appealed this decision and Judge Green's order has been stayed pending EPA's appeal.

1/Certain limited types of dam-related pollution problems do result from "discharges of pollutants". For example, EPA has issued permits for large hydroelectric dams where floor drains inside the dam allow oil and grease to enter the water as it passes through the dam.

DAMS QUESTION 3

QUESTION: What types of water pollution are caused by dams? In your estimation, are these serious problems?

ANSWER: Dams have been identified as a source of 5 types of water pollution:

- o Low dissolved oxygens: Certain dams which impound large, deep reservoirs and release water from deep in the reservorr discharge water low in dissolved oxygen (DO) content during the warm months of the year. Oxygen is depleted in the lower levels of thermally stratified reservoirs due to the decomposition of organic matter, algae, and bacteria. Although these processes also occur in natural lakes, they do not discharge well -oxygenated water from its surface, while the outlet from a dam may be located in the lower oxygen-deficient layer of water.

- o Dissolved metals: The dissolved metals problem is directly related to the oxygen depletion at the bottom of eservoirs which has just been described. Metals such as iron and manganese exist in particulate form in most botton sediments and reservoirs. With sufficient dissolved oxygen in the water, a zone of oxidated iron, manganese and other constitutents develops between the water and the botton sediments which effectively serves as a barrier preventing the bottom sediments from diffusing into the water. Yet, in a low DO condition, the iron and manganese in the interface zone will convert to more soluble forms and allow the metal in the bottom sediments to diffuse into the overlying water. These dissolved metals, unlke their particulate forms, can be harmful to aquatic organisms and can cause the water to require treatment to be usable for domestic, municipal, or industrial purposes.

- o Temperature: The discharge by [illegible] of water which is warmer or colder than the natural stream tempera[illegible]lso a function of thermal stratification and the level of the [illegible]ease structures in the dam. In a deep reservoir during a thermal stratified period, cold water would be released from the bottom of a reservoir, while warm water would be released from the top. The operation of a dam/reservoir facility can change the downstream temperature 20 to 30 F. A various species of fish and other aquatic organisms are adapted to either warm or cold water conditions, dam-caused temperature changes can, and have, resulted in the migration of fish away from certain areas, transforming a warm water fishery into a cold water fishery or vice-versa, and in fish kills.

- o Sediment: Streams carry sediment which consist of organic and inorganic material derived from runoff from the land and from the streambanks and channel bed. When a portion of stream is transformed into a reservoir by the construction of a dam, the normal flow of sediments tend to sink to the bottom. Reservoirs which receive large loads of sediments can fill in at fairly rapid rates. To eliminate the sediment, the water level in the reservoir may be emptied of water so that the stream passes over the reservoir bottom and carry some of the sediment load with it downstream. This can result in the release of water high in sediment content which degrades downstream water quality.

- o Supersaturation: Water can become supersaturated when water flows over dam spillways, and, if the force and velocity are sufficient, the water will plunge to a depth in the stilling basin where the pressure causes air entrained on the way down to go into solution. Supersaturation also occurs in water released from hydroelectric turbines where air has been injected into the penstocks. Supersaturated water can be lethal to fish and other aquatic organisms.

Dams have not been the subject of a comprehensive, water quality monitoring program. However, the types of pollution previously discussed are not believed to occur at a large number of dams. Dams have not been identified in State section 305(b) reports, which list and ranke major pollution problems. So, while dams may cause water quality problems in certain cases, they are not believed to represent significant source of pollution on a national basis.

DAMS Question 4

Question: Do some dams create greater pollution than others? Have you identified the dams that cause the worst problems? What criteria was used?

Answer: Dams have not been the subject of a comprehensive, systematic water quality survey. Dams are not generally subject to routine water quality monitoring. EPA does not maintain or compile water quality data on dams. So there is very limited data available on the water quality problems caused by dams. We have not been able to identify the characteristics of those dams which are known to cause water quality problems.

DAMS QUESTION 5

Question: The Plaintiffs in the case have stated that only 1500 to 2000 dams cause water pollution problems. Couldn't you regulate this small number individually and the others through general or categorical permits?

Answer: We are not aware of any list of dams which cause water quality problems. We are also not aware that anyone has been able to identify the characteristics of those dams which could be expected to cause water quality problems.

EPA believes that since State water quality problems assessments have not listed dams as priority problems, it is unlikely that dams represent a significant source of pollution on a national basis.

We therefore have no basis for singling out those dams that should be subject to individual permits. While general or categorical permits are less resource intensive than individual permits, we do not believe that dams represent enough of a threat to water quality to justify the expenditure of even this level of resources, particularly when they would be at the expense of the control of other, more pressing pollution problems. Moreover the success of general or categorical permits depends on our ability to identify classes of dams that can be expected to have certain types of water quality problems. Since the appearance of pollution problems at dams appears to be highly dependent on site-specific factors, it may not be possible to devise such permits for dams.

Penalties #1

QUESTION: In your proposals, you have asked for major changes in both the civil penalty provisions and the felony provisions.

A) Why do you need these?
B) Could you give some examples of instances when the existing penalty provisions were not a sufficient deterrent?

ANSWER: Administrative civil penalties -

A) The addition of administratively assessed civil penalties gives the Agency more flexibility to deal with noncompliance situations. Currently, the CWA allows the Agency to issue non-penalty administrative orders or to seek remedies (including civil penalties) in a judicial civil action. A non-penalty administrative order may be ineffective in achieving compliance, and yet the option of taking judicial action may not receive high priority attention for cases in which judicial action would be costly, burdensome and time consuming for all the parties involved given the nature of the individual violation involved. The ability to assess administrative civil penalties will give the Agency another tool to use against those violators who ignore administrative orders but whose violations do not seem to merit high priority attention for judicial prosecution.

Administratively assessed civil penalties provide for more efficient enforcement because the procedure allows the evidentiary proceeding (the hearing) to take place at the Agency level with a review of the hearing record in United States District Court. Such an administrative hearing should require less time and expense than a judicial proceeding while providing a fair hearing and full opportunity to present evidence for those assessed penalties.

B) In FY 81, over 500 administrative orders were issued to sources in violation of the Clean Water Act. These administrative orders are not self-enforcing and should be viewed more as an ordered compliance schedule than as a deterrent. Currently, the only method available to the Agency to assess penalties or to enforce one of these non-penalty administrative orders is through a judicial action. At times, the threat of judicial action is not a realistic deterrent since cases with small proposed penalties must often wait to be filed, because these smaller cases are assigned lower enforcement priority. Adding administrative penalties to administrative orders would provide EPA with an effective deterrent without the necessity of potentially protracted judicial proceedings.

Penalties #2

QUESTION: In your proposals, you have asked for major changes in both the civil penalty provisions and the felony provisions.

A) Why do you need these?
B) Could you give some examples of instances when the existing penalty provisions were not a sufficient deterent?

ANSWER: Felony provisions -

A) The addition of felony sanctions to the Clean Water Act will correct an anomaly which currently exists in the statutory scheme. Presently, the Resource Conservation and Recovery Act (RCRA) provides felony sanctions for illegal hazardous waste activity. However, RCRA does not regulate the release of hazardous wastes into publicly owned treatment works or through a point source with an NPDES permit. The Clean Water Act's misdemeanor provisions would apply to this activity. Thus, the person who dumps hazardous waste into a sewer system is subject to misdemeanor sanctions under CWA while dumping the same wastes on the ground could result in felony sanctions under RCRA. This scheme actually creates an incentive to use public sewers for illegal dumping activites. Adding felony sanctions to the Clean Water Act will aid in protecting the enormous investment of federal funds in the nation's sewer systems.

Felony sanctions are an appropriate addition to the Clean Water Act now because of the maturity of the Act and its regulatory scheme. Members of the regulated community have had ten years to become familiar with the requirements of the Act. In this regard it should be noted that felony sanctions are recommended for knowing, i.e., intentional violations of the Act.

Adding felony sanctions also demonstrates the significance attached to deliberate environmental misconduct by the public.

B) EPA's current docket includes several cases involving the deliberate use of sewer systems for the surreptitious disposal of hazardous waste. It seems clear from these incidents that this constitutes an increasingly popular means of 'midnight dumping'.

In United States v. Bushey, et. al. (D.Vt. 1981), an EPA investigation resulted in a successful prosecution based on long-term, deliberate, concealed acts of tampering with water pollution monitoring equipment (among other charges).

In United States v. Lanigen (E.D.Pa. 1982), a joint EPA/FBI investigation resulted in a successful prosecution based on repeated and knowing discharges of pollutants into navigable waters over a period of several years.

In United States v. Sybron Corporation (E.D. N.J. 1982), an EPA referral resulted in a $200,000 fine for repeated, knowing falsifications of discharge monitoring reports under the Clean Water Act.

In each case, the existing sanctions were ineffective in deterring the conduct. Thus, our current docket, as well as these recent prosecutions, clearly reflect the need for stronger sanctions to achieve effective deterrence of serious environmental misconduct under the Clean Water Act.

Nonpoint Source Question 1

QUESTION: Do you agree with this assessment? (-- in spite of the large expenditures we have made for treatment of point source discharges, achievement of water quality goals continues to elude us on a number of priority water bodies because nonpoint sources have not been adequately addressed.)

ANSWER: To some extent, yes. In some cases sound decisions for water quality management, particularly controls of point source pollution can not be made without knowing the magnitude of nonpoint source (NPS) pollution, the effect on water quality limited segments, impact on designated uses, and the effectiveness of Best Management Practices.

NPS loadings are known to cause significant problems which affect every region of the nation. A majority of States, e.g., 1977 305(b) Report listed 37, have indicated a number of their river basins within their borders will not attain CWA's '83 goals because of nonpoint pollution. Of the first 149 areawide 208 agencies designated, 109 identified agricultural, construction, and urban runoff as principal contributors to the water quality problems.

Nonpoint Source Question 2

QUESTION: What is EPA's policy regarding nonpoint sources of water pollution?

ANSWER: It is the policy of the Environmental Protection Agency to encourage and support the identification and resolution of nonpoint source (NPS) contributions to water quality problems by the entities closest to the problems, i.e., State and local agencies, according to their priorities.

Nonpoint Source Question 3

QUESTION: Are we giving adequate attention to possible tradeoffs on water quality limited segments between point and nonpoint source controls, and the resulting savings in cleanup costs?

ANSWER: EPA intends to improve our analysis of, and decisions with respect to, water quality impacts in stream segments classified by the States as water quality limited and the extent or level of point or NPS control needed to protect the beneficial uses of water in those segments. The level of effort and degree of emphasis on NPS pollution controls will be determined by the size or complexity of the problem and focused on only those areas needing action.

QUESTION: What will the Agency do, through 1985, to ensure that NPS controls are factored into decisions about increasingly costly treatment programs required to restore water uses on water quality limited segments?

ANSWER: The Office of Water intends to:

- incorporate NPS contributions in water quality assessments undertaken or required by the Agency;
- integrate statistical analyses of nonpoint source impacts into the development and publication of proposed water quality criteria and standards;
- develop methods to determine and select the most cost-effective mix of point and nonpoint source controls in the awarding of municipal construction grants;
- consider NPS contributions as a part of any consistency reviews, issuance of NPDES permits and/or taking of water enforcement actions by the Agency (or by the States under delegated authority); and
- increase efforts to provide direction and leadership to other Federal agencies which have programs that impact water quality, in particular those agencies whose management or leasing of Federal lands could result in degraded streams, lakes or groundwater.

To support the implementation of these activities, EPA will improve methodologies for analyses, provide technical assistance through guidance and seminars, and work with other Federal agency programs to ensure that NPS objectives are being addressed. Priorities for action will be determined and technical assistance and support will be directed first to those States most ready and willing to undertake NPS activities now. EPA will encourage and support identification and prioritization of NPS problems at the level closest to the problem, i.e., State or locality. Federal NPS efforts will emphasize the use of preventive measures rather than remedial controls wherever possible.

-5-

QUESTION: Can EPA summarize, for each Region:

a. The funding histories for Section 208 NPS projects, including a review of projects addressing or resulting in cost saving tradeoffs between point and NPS controls?

ANSWER: Cost and savings data are limited at present. The attached Table 1 provides information on cost savings due to 208 planning, some of which involve NPS activities. Additional cost-savings information is provided below:

- Region III (Philadelphia)
  Control of NPS contributions would limit the need for AWT for the following areas: Hempstead, Manchester, and Montrose School, MD and Occoquan and Hampton Roads, VA.

- Region V (Chicago)
  Phosphorus reductions resulting from NPS controls will allow relaxed point source restrictions in the Great Lakes Basin.

  BMP's in drainage area found to be cheaper than dredging costs in Illinois lakes.

- Region VIII (Denver)
  Modification of discharger annual point source phosphorus allotment may be modified by nonpoint source control.

TABLE 1

--SUMMARY--

COST SAVINGS IN MUNICIPAL TREATMENT SYSTEMS
RESULTING FROM 208 PLANNING

Region	Location	Description of Action	SAVINGS ($-millions) Capital	O&M (annual)
II	Erie-Niagara, NY	cost-effectiveness studies	35	6.9
	Central New York area	stream reclassification		.027
	New York City	population projection work	130	
III	New Castle Co., Del.	sewer extension plan revision	2	
	Virginia--Potomac River	embayment standards evaluation	11.8	
	North Beckley, W.Va	refined waste load allocation	1.93	
IV	Mississippi--State	hydrologic controlled release oxidation pond systems	26-100	
	Mississippi--State	Gulf Coast regional treatment plan	7.6	3.7
	North Carolina--State	seasonal effluent limits		8-13
	Nashville, Tenn.	modification to effluent limits	3	
	Knoxville, Tenn.	modification to effluent limits	2-3	
	First Tenn-Va Dev't District	regional sewage treatment plant	42	
	Chattanooga, Tenn.	modification to effluent limits	20	

TABLE 1 (continued)

Region	Location	Description of Action	SAVINGS ($-millions) Capital	O&M (annual)
VI	Tulsa, Ok.	decision not to chlorinate	.063	
	Arlington, Tex.	inclusion of WPS loads in WQ models; decision to use ASP instead of AWT at trtmt plants	100	
VIII	Mountainland area, Utah	modification to effluent limits, regionalization	3.5	.112
	Salt Lake County, Utah	modification to effluent limits, regionalization	18	.90
	Pikes Peak, Col.	septic tank study	3	
	Denver, Col.	revised population projections	100-200	
	Southwest Wyoming area	local initiatives following 208 planning	.40	
X	Pocatello, Id.	land application of phosphorus-rich industrial effluent	3	1
	Salem, Or.	revised population, wasteload projections	1.5	
	Eugene/Springfield, Or.	regionalization	3	
TOTAL				

Note: This is just a partial listing of cost-savings resulting from 208 plans. The figures are approximate. However, sticking to the lower end of the range when ranges are given, the total cost savings to the Nation from this sample of actions are approximately $600 million (capital costs) and approximately $16 million/yr. (operations and maintenance)

b. A list of NPS projects conditionally approved and what additional planning work is not yet completed?

ANSWER: There are limited data available concerning conditionally approved NPS projects. Nonpoint source elements are at least conditionally approved in all water quality management plans. More detailed information is presented below regarding incomplete planning:

- Region II (NY)
  Designated management agencies, problem assessments, and BMP's are generally approved. Agriculture, other urban, and construction NPS planning is not complete.

- Region V (Chicago)
  All elements of plans conditional. Agriculture, groundwater, urban, construction, and hydrologic modification are underway; most will be finished within 6 months.

- Region VI (Dallas)
  All elements are conditionally approved.

- Region VII (Kansas City)
  Agriculture - all plans are conditional; Better priority setting and implementation is needed.

- Region VIII (Denver)
  All NPS elements conditionally approved; on-site disposal systems near full approval. No NPS planning completed.

- Region IX (San Francisco)
  All plans approved. Groundwater and erosion and sediment runoff work not completed.

- Region X (Seattle)
  Oregon and Alaska plans are fully approved: Washington and Idaho are conditionally approved.

c. A list of NPS projects currently being implemented, including identification of actual or projected support by CWA, Section 106 and/or other Federal funding, and the amounts of such funding to date?

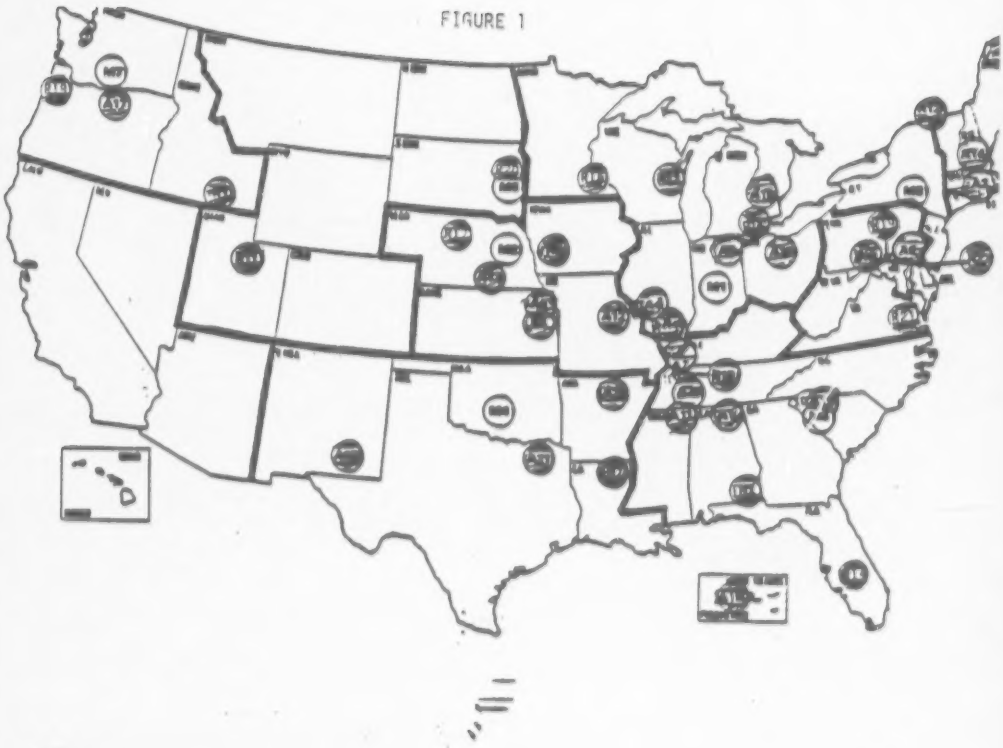
ANSWER: The attached Figure 1 lists and locates approved NPS projects in the agricultural area being implemented. Total or estimated Federal funding expenditures are listed below.

1. National ACP Project - $24,000,000 Federal
2. Rural Clean Water Program Projects - $41,500,000 Federal
3. Model Implementation Projects - $7,000,000 Federal (estimated)

The attached Table 3 lists National Urban Runoff Projects with estimated Federal and local funds expended for the projects. EPA and the Geological Survey are the principal Federal agencies involved in NURP. Federal expenditures are $14.7 million.

A total of $158,313 expended or obligated for a Federal silvicultural (forestry) NPS cooperative program between EPA and the Forest Service. This program involves mutual efforts, including the development of training materials to fulfill educationa needs in States, integration of State forestry and water quality planning programs, institutionalization of WQ management into Forest Service National Forest management and State Assistance programs, and assessment of State recommended Best Management Practices and control programs.

FIGURE 1



LEGEND:

NATIONAL ACP SPECIAL WATER QUALITY PROJECTS

A 1 ALABAMA
Swan Lake
A 2 ARKANSAS
Chief Utley's Water
A 3 CONNECTICUT
Little River
A 4 ILLINOIS
Blue Creek
A 5 INDIANA
Dirty Baker's Ocean
A 6 KANSAS
Soldier Creek
A 7 KENTUCKY
Little Bayou DeChien
A 8 MAINE
Aroostook Presque Isle
A 9 MARYLAND
Cecil County
A 10 MICHIGAN
Saginaw Bay
A 11 MISSISSIPPI
Eroding Wolf
A 12 MISSOURI
Middle Fork of Salt
A 13 NEBRASKA
Hall County
A 14 NEW HAMPSHIRE
Great Hawgatom
A 15 NEW MEXICO
Upper Rio Hondo
A 16 OHIO
A 17 OREGON
Wasco County
A 18 PUERTO RICO
Caguas District
A 19 SOUTH CAROLINA
Tyger River
A 20 TENNESSEE
Gibson
A 21 TEXAS
Lake Fork Creek

RURAL CLEAN WATER PROJECTS

R 1 ALABAMA
Lake Thlocco
R 2 DELAWARE
New Castle County
R 3 IDAHO
Rock Creek
R 4 ILLINOIS
Highland Silver Lake
R 5 IOWA
Prairie Rose
R 6 KANSAS
Upper Walnut
R 7 LOUISIANA
Bayou Lacs
R 8 MARYLAND
Double Pipe Creek
R 9 MICHIGAN
Saline Valley
R 10 TENNESSEE
Hoolfoot Lake
R 11 UTAH
Snake Creek
R 12 VERMONT
St. Albon's Bay
R 13 WISCONSIN
Lower Manitowoc
R 14 FLORIDA
Taylor Ck.-Nubbin Slough
R 15 MASSACHUSETTS
Westport River
R 16 MINNESOTA
Garvin Brook
R 17 NEBRASKA
Long Pine Creek
R 18 OREGON
Tillamook Bay
R 19 PENNSYLVANIA
Conestoga Headwaters
R 20 SOUTH DAKOTA
Oakwood-Lake Poinsett
R 21 VIRGINIA
Nansemond-Chuckatuck

MODEL IMPLEMENTATION PROJECTS

M 1 [illegible]
Indiana Heartland
M 2 NEBRASKA
Maple Creek
M 3 NEW YORK
W Branch Delaware R.
M 4 OKLAHOMA
Little Washita
M 5 SOUTH CAROLINA
Broadway Lake
M 6 SOUTH DAKOTA
Lake Herman
M 7 WASHINGTON
Tarkio/Sulfur

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TABLE 3

PROJECT	TOTAL GRANT AMOUNT	EPA $	OTHER FEDERAL $	LOCAL $	BEGINNING DATE	ENDING DATE
Durham, NH	256,000	192,700		63,300	July 1979	July 1982
Mystic River, MA	981,000	737,300		243,700	July 1979	July 1982
Lake Quinsigamond, MA	513,500	386,000		127,500	July 1979	July 1982
Long Island, NY	2,335,000	1,360,700	350,000	624,300	July 1979	July 1982
Lake George, NY		560,800		270,000	April 1980	October 19[illegible]2
Irondequoit Bay, NY	1,356,200	848,400	225,000	282,800	April 1980	April 1983
Baltimore, MD	2,159,300	1,422,500	218,700	518,100	October 1979	October 19[illegible]
Washington COG	1,857,700	1,424,400		433,300	September 1979	September 1[illegible]
Winston-Salem, NC	764,000	572,000		192,000	September 1979	September 1[illegible]
Myrtle Beach, SC	736,700	553,900		182,800	April 1979	September 1[illegible]
Tampa, FL	750,000	500,000	85,000	165,000	March 1980	March 1983
Knoxville, TN	817,600	575,400	207,300	34,900	July 1980	July 1983
Lansing, MI	1,522,100	1,142,200		379,900	May 1979	May 1982
Ann-Arbor, MI	293,400	220,600		72,800	October 1978	October 1981
Oakland County, MI	630,300	473,900		156,400	June 1979	June 1982
Chicago, IL	41,100	488,100		153,000	April 1979	April 1982

PROJECT	TOTAL GRANT AMOUNT	EPA $	OTHER FEDERAL $	LOCAL $	BEGINNING DATE	ENDING DATE
Champaign, IL	1,042,100	783,500		258,600	April 1979	April 1982
Milwaukee, WI	1,969,300	758,500	826,000	384,800	September 1979	September 1982
Little Rock, AK	1,064,400	800,000		264,000	May 1979	May 1982
Austin, TX	400,000	300,000		100,000	July 1979	July 1982
Kansas City, MO	1,260,000	690,000	229,600	340,400	May 1980	May 1983
Denver, CO	2,156,500	1,211,700	588,400	392,000	July 1979	July 1982
Salt Lake City, UT	1,493,300	846,700	303,200	343,400	September 1979	September 1982
Rapid City, SD	945,800	552,600	209,000	184,200	January 1980	January 1983
Castro Valley, CA	321,900	225,000	21,900	75,000	September 1978	November 1980
Fresno, CA	1,213,700	796,000	155,000	262,700	April 1980	April 1983
Bellevue, WA	1,365,300	613,400	549,000	202,900	September 1978	September 1982
Eugene, OR	50,000	50,000			February 1979	February 1982

d: A summary description of remaining NPS problems as identified in 305(b) reports to Congress and/or other public EPA or State reports on NPS problems, including the extent to which specific NPS problem identification is incomplete?

ANSWER:

- 109 of the first 149 areawide agencies designated under section 208 identified agricultural, construction and urban stormwater runoff (which does not include combined sewer overflows) as principal contributors to their water quality problems.

- At least 37 States have reported that they will be unable to meet 1983 goals in at least part of their waters because of nonpoint pollution.

- Although toxic metal loadings are difficult to estimate on a national scale, studies of individual cities have shown concentrations of certain toxic metals in urban stormwater runoff to be many times greater than concentrations in municipal sewage.

Information on the extent to which specific NPS problem identification is incomplete has been provided by our Regions as follows:

- Region III (Philadelphia)
  Agriculture in Pautuxent, MD, Riviana reservoir, VA and Chowan River between NC and VA. Urban along the Potomac River. In VA 25 areas identified, water quality aspects not complete.

  Agriculture and construction. RCWP, MIP, and NURP projects are/have complied adequate assessments; otherwise remaining are insufficient.

- Region VI (Dallas)
  Silviculture, with need for fine tuning BMP's for local variations.

- Region VII (Kansas City)
  Soluable transport and instream effects of Ag. chemicals: a better understanding of the impacts and effects is needed. Stormwater impacts not adequately identified to serve as justification/base for control programs. BMP effectiveness (Ag.) information critically required.

- Region VIII (Denver)
  CO: Salinity in Colorado River (as regional problem with resultant hesitation/problem with interstate control mechanisms); mining; urban (particularly rapid growth in areas with limited carrying capacity, septic tanks, hydrologic modification. Better problem assessment work required on grazing and irrigated agricultural lands. More information is needed Regionwide on the extent of the problem, impact, and the cost/effectiveness of BMP's.

- Region IX (San Francisco)
  Specific geographic areas need intensive studies including loading information relative to groundwater problems. NPS planning and assessment on Indian lands is a uncompleted task.

e: EPA's conclusions about the scope and priority of NPS problems in each Region?

ANSWER: While every Region is impacted significantly by some type of nonpoint pollution, the types of problems vary dramatically from Region to Region, according to the topography, climate and types of land use which prevail. One implication of this is that the solution of nonpoint source problems will require a flexible approach which takes these variations into account. (See Table 4, Figures 2 and 3).

Priority Ranking for Severity of Construction Runoff Problems

*. Washington, D.C.	17. Iowa	33. Utah
2. New Jersey	18. Arkansas	34. New Mexico
3. Louisiana	19. Missouri	35. New Hampshire
4. Maryland	20. Connecticut	36. Wisconsin
5. Indiana	21. Rhode Island	37. Arizona
6. Tennessee	22. Colorado	38. Oregon
7. Mississippi	23. Florida	39. Minnesota
8. Texas	24. South Carolina	40. Vermont
9. Alabama	25. Massachusetts	41. Idaho
10. Oklahoma	26. Georgia	42. Nebraska
11. Kentucky	27. New York	43. South Dakota
12. Ohio	28. Delaware	44. Kansas
13. Virginia	29. Pennsylvania	45. Montana
14. Illinois	30. West Virginia	46. Wyoming
15. California	31. Michigan	47. Maine
16. North Carolina	32. Washington	48. North Dakota

*Unranked: Alaska, Hawaii, Nevada

FIGURE 7

Basins Affected* by Pollution from Agricultural Activities

* In whole or in part

Note: Affected basins are shaded

(Reproduced from 1977 305(b) Report to Congress)

(Reproduced from 1977 305(b) Report to Congress)

DOD AND CLEAN WATER ACT QUESTION #1

QUESTION: You are seeking some major amendments to the Presidential exemption provisions of the Act. Could you describe what is inadequate?

ANSWER: There are two principal areas in which DoD feels the current presidential exemption provisions are inadequate. First, there is no statutory authority for the President to exempt Federal facilities from the provisions of the Act for either toxic discharges or new sources. Severe problems could arise through the lack of this authority. Secondly, there is no parallel exemption authority applicable to civilian industry, which would be absolutely essential to national survival in time of war or national emergency. These are significant omissions in the current statute, as supported by the following discussion.

One major example of the first area involves two partially active and six inactive Army ammunition plants, where full-scale production levels would be significant during mobilization. Pollution abatement controls for the two partially active plants can handle the minimal current production levels. However, during mobilization, there would be at least a 50 percent shortfall of wastewater treatment capability. The waste streams from all eight of these facilities contain both toxic and conventional pollutants. A three-year period would be required to allow sufficient time to fund adequate pollution controls, to design, and to construct them.

The impact of failing to exempt these plants and similar facilities would be severe. For example, without the exemption, the six inactive plants could be required to obtain "new source" permits, and start-up could be delayed until all pollution abatement controls were in place. This alternative would reduce DoD's capability to produce explosives, propellants, small arms ammunition, and artillery ammunition by more than 50 percent. In addition, repair and rehabilitation of artillery pieces would be reduced by 50 percent. These severe impacts on readiness and resupply capability are unacceptable.

Water pollution controls beyond the minimal controls currently in place will not be installed until needed at the 8 Army ammunition plants because of problems in fully characterizing the site specific waste streams for those facilities in stand-by status. Until they start production, it is not possible to determine the extent and types of pollutants generated. The exact volumes, concentrations, and types of pollutants resulting from these production facilities are unknown, since these pollutants were not a known concern when these facilities were last in use. Wastewater treatment at each ammunition plant is site specific, because of differences in production processes at each plant.

DOD and CLEAN WATER ACT QUESTION 1

In addition to the characterization problems, it is DoD policy that pollution abatement projects for inactive sources will not be funded until a definite requirement exists, in that large expenditures to purchase and install equipment which may never be required, and if required at some future date may be obsolete, is not prudent management.

Secondly, the Administration bill proposes language such that, in time of war or national emergency, the President could modify or suspend the application of the provisions of the Act. This would allow the President to exempt civilian industry which is critical to a war effort.

Civilian industry, in attempting to satisfy DoD contractual requirements by increased production rates, manufacture of different product lines, and modification of production processes, could cause short-term pollution problems.

The Defense Department is heavily dependent upon civilian industry's ability to produce a wide range of vital war material. In the event that a surge in production becomes necessary in a military contingency, national emergency, full-scale mobilization, or war, this provision would allow the President to exempt such facilities from wastewater treatment requirements to allow them to respond rapidly during a crisis situation.

Clearly, during a period of war or national emergency, the public interest would be best served by giving the highest priority to our national defense requirements.

DOD AND CLEAN WATER ACT QUESTION 2

QUESTION: When would you have used this authority in the past?

ANSWER: The Department of Defense has never requested a presidential exemption from provisions of the Clean Water Act. DoD believes that such exemptions should be limited to cases of demonstrable need, which are clearly in the paramount interest of the United States. If the specific authority we are now seeking had been authorized previously, DoD still would not have requested an exemption. In the example cited previously, there has not been a need to mobilize fully the munitions production base since the passage of the 1972 Clean Water Act amendments. DoD is concerned, however, that future contingencies could require full-scale mobilization, and DoD would be severely restricted by the lack of presidential exemption authority for new sources, toxics, and for private industry.

DOD AND CLEAN WATER ACT QUESTION 3

QUESTION: Declaration of a National Emergency is fairly common. When was the last one? How long do they last?

ANSWER: The most recent national emergency, of which we are aware, was declared by the President in 1979 in connection with the Iranian hostage matter. That national emergency, with respect to Iran, has been continued at appropriate intervals since its initial declaration.

The duration of a national emergency, for the purpose of authorizing the President to exercise various statutory authorities that depend on the existence of a national emergency, now is determined by the National Emergencies Act, (P.L. No. 94-412 (1976), 50 USC §§1601-1651). Under the Act a national emergency automatically ends on the anniversary of its declaration unless extended by the President, and each extension must be renewed annually. An emergency also may be terminated by presidential proclamation or by a concurrent congressional resolution.

We visualize that use of the presidential authority to suspend or modify the Act, that we are now seeking, would be extremely rare. Its need would most likely arise in times of severe crisis calling for large-scale mobilization, as was the case in the World Wars and the Korean War.

DOD AND CLEAN WATER ACT QUESTION 4

QUESTION: There is an executive order covering Federal facilities compliance and Presidential Authority (Executive Order 12088). Is the Department of Defense seeking changes in that?

ANSWER: Yes, on April 20, 1982, DoD recommended to the Executive Director, Presidential Task Force on Regulatory Relief, Office of Management and Budget that changes to Executive Orde 12088 be made.

DOD AND CLEAN WATER ACT QUESTION 5

QUESTION: What specifically are the changes? Why?

ANSWER: Executive Order (E.O.) 12088 was issued on October 13, 1978, to improve Federal compliance with pollution abatement statutes, and to further voluntary overseas pollution control activities. Two significant changes were made from the predecessor E.O. 11752.

First, E.O. 12088 eliminated the prior delegation (in E.O. 11752) to Federal agency heads of the presidential exemption authority contained in several pollution abatement statutes. That delegation made available an important tool to agency heads to assure that essential mission needs would be met. DoD has recommended that the delegation of the President's exemption authority for Federal facilities be reinstated. The need for such delegation does not derogate from the need to expand existing presidential exemption authority under the Clean Water Act. This is a relatively narrow delegation, in that it would not apply to the requested presidential authority to suspend the application of provisions of the CWA in times of war or national emergency. The delegation that we have requested in the E.O. is necessary to permit a timely response to crisis situations when the delay of processing papers to the President and the further delay of additional reviews would be unacceptable.

Secondly, E.O. 11752 had required Federal agencies that both construct and operate a facility overseas, to construct and then to operate it in accordance with the pollution standards of the host country. E.O. 12088 changed this to require Federal agencies also to bring facilities they operate, but do not construct, into compliance with host country standards. DoD has recommended that E.O. 12088 be revised to eliminate the requirement for Federal agencies to use their resources to bring overseas facilities, for which the host country is responsible for construction or improvements, into compliance with host country standards.

This change would be consistent with congressional reluctance to appropriate funds for construction of pollution abatement projects overseas in instances where the host country is responsible for construction or improvements. Cognizant committees have said that DoD priorities should be to emphasize correction of domestic pollution problems.

QUESTION: You have not included in your recommendations to Congress a provision in Best Available Technology requirements to allow flexibility in application -- known as the BAT modification. I think I understand. Would you support such a provision in legislation in 1983? Further, would you support a provision in any legislation this year requesting the Environmental Protection Agency to submit recommendations, which could include legislative proposals on such a provision next year?

ANSWER: It is the Agency's position to not recommend a BAT environmental modification provision or any other provision for that matter, unless we are sure that: (1) the current approach is not working; and (2) there is substantial agreement on a modified approach. We did not recommend a BAT environmental modification this year, and we will not in the future unless these conditions are met. The Agency expects to be in a better position to assess the value of such a provision in a year as the BAT regulatory process progresses and we continue to study the merits of modification alternatives. We would welcome the opportunity to work with Congress in reviewing the pros and cons of the concept and alternative proposals to implement it. However, we see no need to add a statutory provision to accomplish this. Moreover, since we have not yet ascertained the need for such a program we believe that such a provision would imply more than is warranted at this time.

MITCHELL 1

QUESTION: You state that the Agency feels that exemptions from BAT and BCT technology based controls are premature at this time, largely because the majority of the guidelines are not yet promulgated, and further experience with the problems which may arise from their implementation will determine whether and to what degree such waivers are necessary. Since the majority of these guidelines will not be promulgated until 1983 or 1984, does this mean the Agency will wait a number of more years before it transmits legislation permitting BAT and BCT waivers?

ANSWER: The Agency may or may not transmit legislation for BAT and BCT waivers in the future. As we stated in our testimony, our recommendation for a modification of the BAT program will rest on two major criteria: (1) evidence exists that the program is not working; and (2) there is substantial agreement on a modified approach.

While it is true that the promulgation of these guidelines will substantially advance our analytic ability, it does not in itself justify the development of an environmental modification program. On the other hand, the Agency need not wait for all the guidelines to be promulgated prior to transmitting such a proposal. The critical factor is not the number of guidelines promulgated, but our ability to make accurate analytic judgements as to their net effect when promulgated. Even without promulgation, within a year the BAT regulatory process will have advanced to the point where regulatory alternatives are confined to a few well-defined options which could be analyzed in light of the merits of a modification program.

MITCHELL 2

QUESTION: You state that you were unable to meet promulgation deadlines for toxic industrial standards because of limited Agency knowledge about the nature of the pollutants to be controlled, and the necessity of building, an extremely large data collection and analysis program from a limited data base.

In your opinion, has the state-of-the-art of toxics research progressed to the point that reduced research funding will not be detrimental to your development of the BAT standards you are committed to complete by specific dates?

Can you provide the Subcommittee with an estimate of how much of your research funding has been earmarked for this program over the years?

If more funds had been available for research in the toxics area, could you have completed work on effluent standards sooner?

ANSWER: The Agency has addressed the problems relating to the lack of methods for toxics measurement, and the lack of data on the performance of wastewater treatment technologies in removing toxic compounds. EPA laboratories played a key role in developing the techniques necessary for the guidelines program. Approximately $30 million was spent by EPA's research and development arm in this effort from 1977-1982. This is an enormous sum of money. This investment has resulted in the development of those analytical tools necessary for promulgating effluent guidelines in accordance with the proposed schedule.

It is possible that providing additional research money in the past to develop these techniques might have been helpful in completing the process sooner, but hindsight cannot aid us in this effort now. It is important to recognize that the Decree was signed in 1976 and, at that time, the Agency's scientific expertise had to play catch-up with new regulatory directions. The Agency no longer requires extensive research in support of BAT standards, our research will now be concentrated in other areas, such as developing techniques for translating water quality standards into permits.

MITCHELL QUESTION 3

QUESTION: Section 3 of the Administration bill extends the secondary treatment deadline for POTWs from 1983 to 1988. Have not those plants not in compliance already applied? Doesn't this extension merely give those facilities coming into noncompliance additional defenses to enforcement?

ANSWER: Virtually all plants which were eligible for extensions under section 301(i) in the current Act have applied for such relief. Under the present legislation, those plants which received extensions must complete construction by 1983. Should a POTW fail to meet the requirements of its extended schedule through a demonstrated lack of resolve, the Agency will take immediate enforcement action against it.

In the 1981 construction grant amendments to the Clean Water Act, Congress provided that POTWs which cannot meet the 1983 deadline "...due to changed conditions affecting the rate of construction beyond the control of the owner or operator...," such as lack of Federal funds, labor disputes, etc., could apply for an additional extension to 1988. If a plant meets the test for the additional extension, it could receive only that amount of additional time necessary to complete construction.

Senator Mitchell, #4

QUESTION: Should EPA and the NPDES States be required to examine and modify 10-year permits to reflect new BAT, water quality, and other toxic limits.

ANSWER: Yes. Upon passage of its CWA reauthorization recommendation, EPA will propose to revise the Consolidated Permit Regulations to require the permitting agency to modify an NPDES permit to reflect new BAT effluent limitations, water quality and other toxic limits which apply to the permittee. The current permit modification regulations authorize the permitting authority to modify a permit to incorporate a toxic effluent standard or prohibition but only specifically authorize a permittee to request a modification to meet a new effluent limitation or State water quality standard.

MITCHELL QUESTION 5

QUESTION: (a) Am I correct that your civil penalties amendment eliminates the requirement for evidentiary hearings? If so, why? (b) This Committee has traditionally disliked an administrative assessment of civil penalties. Do you believe there is sufficient need for such a procedure in this case?

ANSWER: (a) This section does provide for the assessment of a civil penalty after notice to the violator and the opportunity for a hearing. The hearing is not subject to the requirements of the Administrative Procedures Act (APA). The Agency is not prevented from using APA hearings, however. This section gives the Agency the flexibility to use different procedures to deal with different levels of violations. For example, violations subject to lower penalty amounts may be more appropriately addressed in an informal hearing process similar to that utilized by the Coast Guard in assessing penalties under section 311 of the Clean Water Act. Higher penalty amounts may be assessed after full APA hearings.

The Agency is committed to procedures which allow all violators to submit all relevant evidence with regard to the alleged violation and the amount of the penalty at an Agency level hearing.

Persons who are aggrieved by final Agency action under this section may also seek a review of the record of the Agency proceedings in the appropriate United States District Court.

(b) Yes. The Clean Water Act currently gives the Agency the option of issuing an administrative order or pursuing a judicial civil action. Many times an administrative order may not bring about compliance, but the timely pursuit of a judicial action may not be realistic because of the expense, and delay involved when compared to the severity of the individual violation. The ability to assess administrative civil penalties gives the Agency an enforcement tool with more potential deterrent effect than an administrative order but without the expense and delay of a judicial civil action. This should result in speedier resolution of noncompliance situations.

MITCHELL QUESTION 6

QUESTION: Your final provision in the Federal exemption amendment gives the President authority to suspend or modify all the provisions of the Clean Water Act in periods of war or national emergency. Doesn't the President already have such authority? Why is this necessary?

ANSWER: The current presidential exemption authority is limited to discharges of conventional pollutants from existing Federal facilities and to unique military equipment. There is no provision for presidential exemptions from emerging standards for toxic pollutants, or for new sources. Further, there is no parallel provision to provide for exemptions for civilian industry. In times of crisis, defense production can be expected to surge to respond to defense needs. In a war or national emergency, the proposed provision would be essential to provide for critical mobilization requirements, to strengthen the production base of the defense industry, and to ensure rapid response in a crisis situation. A provision such as we have proposed is not unique. For example, section 409(c) of the Chemical and Biological Warfare Program Act (50 USC §1515, P.L. 91-121) states "... the operation of this section, or any portion thereof, may be suspended by the President during the period of any war declared by Congress and during the period of any national emergency declared by Congress or by the President."

MITCHELL QUESTION 7

QUESTION: It is my understanding that your amendment exempting the military use of live shells and bombs in training exercises from the NPDES permit process is in response to a specific problem in Puerto Rico. Could you please submit specifics on this situation. Are there any other areas expected to be affected by this amendment?

ANSWER: The Commonwealth of Puerto Rico alleged in a suit in 1978 (Barcelo v. Brown) 478 F. Supp 646 (D.P.R. 1979) that the Navy had violated, among other things, the Clean Water Act, through the use of the Island of Vieques (part of the Commonwealth) for target practice by ships and aircraft of the US Atlantic Fleet. Vieques is a vital part of the Atlantic Fleet Weapons Training Facility (AFWTF). It is imperative that the Navy be allowed to continue its training operations at that location in order to ensure the readiness of the Atlantic Fleet. Shells fired from ships and bombs dropped from aircraft on both land and sea targets occasionally hit the water.

The Navy complied with the Judge's ruling, and applied for a permit from the Environmental Protection Agency in December 1979. EPA prepared a draft permit and submitted it for public comment in 1981. The Navy has agreed to the requirements of the permit. The Commonwealth of Puerto Rico has failed to issue a section 401 Certification of Water Quality, which is a prerequisite under the CWA for issuance of the permit. The Navy has filed suit in Federal District Court, alleging that the actions of the Commonwealth of Puerto Rico were arbitrary and capricious. This case is in the preliminary procedural stages and a final decision is not expected for some time (12-18 months).

The munitions area will also be affected by this amendment. Munitions expended in the course of training exercises by the armed forces anywhere in the United States which reach navigable waters could potentially be subject to an NPDES permit requirement. For example, small arms ammunition which accidentally strikes a stream crossing a military post, during target practice, might be considered subject to Clean Water Act point source permit requirements. There are other examples of target ranges which are potentially affected. The proposed amendment would clarify congressional intent on this matter.

DoD considers the clear import of the CWA regarding the definition of munitions as pollutants to be aimed at <u>waste</u> munitions. This amendment would make it clear that there is no need for an NPDES permit in these cases where necessary ordinance training takes place. It would leave unchanged current regulations regarding discharges of <u>waste</u> munitions.

MITCHELL QUESTION 8

QUESTION: I find it difficult to believe that many local governments will be able to run their own pretreatment programs. Surely few of them would have the technical expertise to establish and operate such programs without significant expense. Local communities are also probably least able to deal with the political/economic power held by industrial indirect dischargers. What are your thoughts on this? How many localities would you expect to capably take over their own pretreatment programs?

ANSWER: In many situations, local governments have demonstrated their ability to successfully operate POTWs. The pretreatment program is simply an extension of that pollution control effort and is not beyond the capability of those municipalities. In fact, some cities have sufficient ability and resources to develop and operate industrial toxic control programs independent of Federal technical guidance, financial support, regulatory requirements and enforcement support. It is with these cities in mind that EPA has proposed greater flexibility in the pretreatment program.

However, to direct and assist those cities which need support, EPA is maintaining a substantial pretreatment program as an Agency priority. Mandatory categorical standards will be promulgated to establish discharge limits for the major industries. Where mandatory standards are not promulgated, the Agency will issue guidance to provide the technical basis for State and local standards. The development of local pretreatment programs continues to be eligible for Federal construction grant funding. EPA's General Pretreatment Regulations establish the framework for local programs to ensure minimal adequacy. These regulations are implemented through Regional and State NPDES permitting offices wih the support of EPA's Office of Water Enforcement and Permits contractor resources. And finally, EPA's Enforcement Office stands ready to bring actions and support State and local compliance activities where there are violations of standards and permit requirements.

Statement of J. William Haun

Hearings on the Federal Water Pollution Control Act

July 21, 1982

Senate Committee on Environment & Public Works

Mr. Chairman and Members of the Committee:

My name is J. William Haun, chairman of the Clean Water Project of the National Environmental Development Association, a coalition of industry and labor which seeks to improve the effectiveness of the Clean Water Act while allowing for development and revitalization of the American economy. I am accompanied today by Jeffrey Zimmerman, chairman of the technical committee for the NEDA Water Project.

In some respects, this is a homecoming for me. I testified before Congress on the Federal Water Pollution Control Act when it was new legislation being considered in 1971. I testified once again during its last review in 1977. I have been involved in environmental matters for more than 15 years. I am a member of the Science Advisory Board of EPA on the Environmental Engineering Committee which is currently studying issues associated with the Federal Water Pollution Control Act. I have served as U.S. representative to several international organizations concerned with environmental affairs, and I advised the United Nations Environmental Program. It is from this background that I now come before you to discuss the Federal Water Pollution Control Act.

INTRODUCTION

By the early 1970's, Congress had received ample evidence of water pollution. In many lakes and rivers fish had died, swimming was prohibited and human health was endangered. Streams were polluted to the point where they could no longer support life, and a river was so overburdened with combustible pollutants that it could be set afire.

In a wide-ranging response to a discernible crisis, Congress in 1972 enacted one of the nation's key environmental laws: the Federal Water Pollution Control Act, also known as the Clean Water Act. In 1977, the law was substantially amended.

The Clean Water Act has been successful. In many cases, it has helped prevent further water pollution in America. The cost of this success has been high, in terms of both dollars and manhours expended to clean up pollution and of the decisions of government, business and the public with regard to economic development. The Clean Water Act has had, and will continue to have, a daily impact on the lives of American citizens.

Ten years' experience with the law provides us with valuable insight into both the strengths and weaknesses of the Act. There can be no question that the strengths of the Act have brought many tangible benefits. However, with 10 years of success have come 10 years of problems, many of them seriously hampering the efforts of both government and industry to comply with the intent of the Act. If the

Clean Water Act is in need of change, and we believe that it is, the needed changes are those which will improve our ability to continue the important work of restoring and protecting our nation's waters.

Themes of Change

In reauthorizing the Act, we would encourage this Committee to set the following goals and to keep them firmly in mind throughout your deliberations:

> Keep the Federal Water Pollution Control Act tough but responsible.
>
> Make the law one which encourages rather than discourages compliance by removing the flaws which have caused confusion, uncertainty, frustration and friction between those who regulate and those who are regulated.

Indeed, that is the central theme of our testimony today. Both industry and government agree that the control of water pollution is a goal worthy of our best efforts. And yet, the first ten years of the Act's existence have been marked by confrontation, contention and conflict. Why? We believe that industry and government have often been cast in the roles of adversaries because of problems in the Act which we now have the opportunity to correct.

I would like to suggest three categories of weaknesses in the Act which have caused these problems.

The first category is excessive complexity. The second is regulatory inefficiencies and the third is unrealistic expectations.

Examples of the Act's excessive complexity are great. This undue and counter-productive complexity stems from the tendency of Congress to approach law-making in a conceptual manner. From what appears to be a simple concept flows regulation upon regulation without regard to either their administrability or their workability. Pretreatment falls into this category and I will discuss this issue in more detail later in my testimony. Complexity also arises from the fact that we are constantly learning more about our aquatic environment. New regulations are layered on top of old ones in a feverish attempt to keep up with technological advances in detection and abatement techniques.

Excessive complexity only contributes to delay, frustration, confusion and resources wasted by both government and the regulated community. Instead of spending our energies on pollution control, we seem to become mired in trying to deal with an elaborate regulatory framework, in time-consuming litigation, and in trying to react to new problems created by government reacting to old problems.

The second weakness of the law is its regulatory inefficiency. An efficient regulation is one which clearly sets forth the requirements upon the regulated party so that compliance with the regulation can proceed expeditiously and without wasted effort.

The Clean Water Act has spawned an inordinate amount of regulatory inefficiency the responsibility for which cannot be laid entirely on the EPA. The massive size of the program, which has resulted from the statutory directive to issue permits for every discharge even if the discharge is insignificant, is a symptom of this inefficiency.

The third category of weakness is unrealistic expectations. An example of this problem is the continuous search for ways of reducing pollutant levels until we reach that state described as "zero discharge." Industry has spent billions of dollars in pursuit of that goal and has made some truly remarkable advances in pollution abatement. However, ten years of experience has shown us that we are fast reaching the practical limits of technology and that further removal of pollutants from certain types of industrial discharges may be self-defeating.

An inflexible Act tells us that we have no choice but to reach for the next level of pollutant removal, regardless of the cost or of the relative improvement in water quality. For instance, the present program to control toxic pollutants leaves us little choice except to install another level of effluent controls even if there is no improvement in water quality.

OVERVIEW OF THE FEDERAL WATER POLLUTION CONTROL ACT

While I am sure that Members of this Committee are familiar with the Act, it may be helpful to briefly review its principles and features as a prelude to examining its parts.

The Act consists of five titles. Title I specifies the overall goals of the Clean Water Act -- to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." It establishes as a national goal the elimination of discharges of pollutants into the nation's navigable waters by 1985. Where attainable, it sets a July 1, 1983 interim goal that water quality provide for the protection and propagation of fish, shellfish and wildlife.

Title II establishes the federal program for construction of publicly owned treatment works. It specifies the federal share of funding and sets forth procedures for priority determinations and cost-effectiveness guidelines. Section 208 of this title sets up an extensive program for states to establish areawide waste treatment programs.

Title III of the Act establishes a series of progressively more stringent effluent limitations for point-source dischargers and calls for state adoption and federal approval of water quality-related standards for interstate waters. It also provides for effluent standards for toxic pollutants and for pretreatment of industrial wastewaters prior to their being discharged to a publicly owned treatment works. This section also calls for enforcement, inspection and monitoring activities to assure compliance with the Act's provisions. In addition, it establishes control programs specifically aimed at oil and hazardous substances, thermal

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discharges, pollution from marine sanitation devices and abatement of international water pollution.

Title IV establishes the permit requirements under the Federal Water Pollution Control Act, called the National Pollutant Discharge Elimination System. It is through this program that discharges of water pollutants into our nation's waters are controlled. Any discharger of any water pollutant must first obtain a permit in order to discharge into a water body. This section also establishes criteria applicable to discharges to oceans, and creates a permitting program administered by the Corps of Engineers for the discharge of dredged or fill material and provides for disposal of sewage sludge.

Title V includes definitions and provisions for administration.

With that brief overview of the Act, I would now like to discuss in detail those items affecting discharges from industrial and agricultural sources which are included generally under Titles III and IV. Specifically, I will discuss standards and deadlines, permit requirements and I will touch on goals and objectives of the Act as they relate to its operational aspects.

EFFLUENT STANDARDS AND DEADLINES

The Federal Water Pollution Control Act provides for phased implementation of its requirements. It requires industry to install

increasingly more stringent water pollution controls. The first level of control--Best Practicable Technology (BPT)--was required in 1977.

The next level of control--Best Available Technology Economically Achievable (BAT) for toxic pollutants and Best Conventional Technology (BCT) for conventional pollutants--is to be installed by 1984.

I believe that Congress expected significant additional reductions in water pollution by moving from BPT levels to BAT levels of control. Our experience indicates that for a number of industries, BPT is extremely effective in removing toxic substances as well. Consequently, there may be little or no benefit by moving from BPT levels to BAT levels.

There is a growing body of evidence showing that basic treatment technologies, installed as BPT in 1977, do remove considerable quantities of toxic priority pollutants and in many cases greatly reduce or eliminate the threat of acute and chronic toxicity to the aquatic environment. Several studies performed by EPA in cooperation with the oil and chemical industries show that BPT treatment reduces toxic pollutants to low, and in many cases, to levels of detection. I am sure you will hear more about these studies later in your hearings.

Studies performed by the states are beginning to indicate that the toxic water pollution problem may not be as great as anticipated.

Recent studies by the State of Illinois, for instance, show that no toxic water pollution problem exists in the overwhelming majority of cases it reviewed.

This evidence has been reviewed by a committee in the House of Representatives which has reached similar conclusions. EPA now forecasts that for many industries, BPT may be doing an excellent job in controlling toxic pollutants and that additional control requirements may not be needed.

The point I wish to make is that the toxics problem may not be as big as Congress might be led to believe. Based on the experience thus far, it would appear that for many industries, BPT controls are effective in controlling toxic wastes. Moving to BAT, which is anticipated by Congress to be a significantly more severe set of controls, may in fact produce little or no benefit to water quality. However, I cannot make that statement across the board. There may be cases in which additional BAT controls would result in a significant additional removal of toxic pollutants.

I believe that the phased implementation of water pollution control programs is a sound approach and should be continued. However, EPA should be directed to consider the effects of BPT on toxic pollutant removal before setting BAT guidelines. In cases where the agency finds existing BPT levels to be sufficient, EPA should not require any further controls which would not significantly reduce additional amounts of water pollution.

DEADLINES

A key feature of the phased implementation of the Federal Water Pollution Control Act is deadlines by which industry and municipalities must meet the BAT/BCT control technology requirements. Deadlines under this law--as well as under other environmental laws--set up a classic institutional mismatch. This issue goes to the fundamental weakness of this Act and other environmental statutes.

Congress now requires industry to install and operate BAT controls by July 1, 1984. Failure to have these controls in place will constitute a violation of the law. A combination of circumstances now makes it clear that, for the most part, industry will not meet these deadlines. EPA rulemaking is at the heart of the problem.

Under the law, EPA was to have established final effluent guidelines defining BAT and BCT for industry categories by July 1, 1980. In no case was EPA able to promulgate these guidelines by the 1980 deadline. The current schedule shows that the first guideline was promulgated in January 1981. The last guideline, if on schedule, would be finalized no earlier than June 1984. And this guideline, aimed at the organic chemical industry, is one of the most important guidelines.

Running parallel to the statutory deadlines for action on BAT, EPA is on a court ordered deadline for action. The 1976 Flannery decree

originally required EPA to develop BAT limitations by December 31, 1979. A 1979 modification of the court order pushed off the last of the deadlines until May 1981. Once again, EPA failed to meet these deadlines. Once again, EPA asked for a time extension. Instead, in May 1982, a court ordered EPA to finalize all of the BAT guidelines within one year.

This puts EPA and regulated industry in a dilemma and points out two problems. The first problem is an institutional mismatch. Simply stated, industry will be punished because the federal government has not fulfilled its obligation to develop guidelines. Clearly this does not punish the party who has control over the situation. Industry is now at a point where it must either begin to design, engineer and order equipment in order to meet the 1984 deadline, or be in violation of the law. This choice must be made without knowing what the BAT guidelines will be.

The second problem points to the fundamental weakness of EPA's workings and importantly the nature of environmental statutes. Congress has consistently underestimated the complexity and magnitude of the problem at hand and overestimated the ability of EPA, scientists and the regulated community to deal with these problems. With regard to BAT, the science, engineering and development of defensible guidelines is taking considerably longer than was originally anticipated. This does not say that the task cannot be done, but that the public and Congress must recognize that we cannot force scientific understanding--at least to an extreme degree.

The solution to this problem is clear. The deadlines once again must be moved by Congress. I recognize that Congress must continue to push EPA to promulgate guidelines. But I would caution this Committee against setting a uniform national deadline which would continue to cause institutional inequities. Uniform deadlines superimpose arbitrary demands on the capabilities of both government agencies and industrial firms without reference to real-world circumstances. The result is confusion, costs and unsteady progress in controlling pollution.

An equitable and effective solution would be to require each industry to meet BAT guidelines three years after they are promulgated. This uniform period of compliance--in essence, a deadline-- would give each affected industrial facility or industrial group the same amount of time in which to comply, while not allowing delay once the requirements are known.

Congress should give EPA guidance on a schedule to promulgate final BAT guidelines and should maintain pressure on the agency to move expeditiously toward its goal.

MODIFICATIONS TO BAT

Before leaving the subject of BAT, I would like to touch on one other issue which is of great importance. That is the subject of modifications to BAT requirements.

First, a digression. The Act operates on two tracks. The first track, which is the underpinning for effluent standards, is the technology based approach to water pollution control. In short, for simplicity the Act requires the setting of effluent limitations without considering effects on a water body. Effluent limits are set on the basis of the percentage of chemical substances removed.

Superimposed on this structure, is the ambient-based approach water quality standards. These standards establish limitations on pollutant levels in water bodies, the limits being designed to protect certain values, such as aquatic life and recreation uses. Sources proposing to locate on bodies of water with assigned water quality standards, in addition to installing the required technology-based level of control, must also show that the discharge will not exceed the ambient-based water quality standards. If water quality standards are shown to be exceeded, the source will need to install additional controls.

Congress allows the blending of this technology-based and ambient-based approach in one other way. Currently, the law allows EPA to grant modifications to technology-based control requirements for nonconventional pollutants based on the fact that water bodies can absorb pollutants without harming water quality. In short, for nonconventional pollutants, a source may receive a modification to the technology-based standard if it can show that the modified discharge will not adversely effect public health, welfare and aquatic life. This is an ambient test. The source applies this modification on a case-by-case basis.

This modification is not currently available for toxic pollutants which are subject to the technology-based BAT standards. We believe that sources discharging toxic pollutants should have the same ability to demonstrate compliance with the law through the ambient approach as do dischargers of nonconventional discharges. The principle that water bodies can safely absorb pollutants without harming either human health or water quality applies here, as well. Instead of installing control techonology, which might have little benefit, an applicant should be be allowed to demonstrate, using appropriate monitoring and reporting programs, that the toxic pollutants are being discharged in insignificant amounts and will not cause toxic effects to public health, welfare and water quality.

This does not signal a wholesale shift away from the technology-based approach which is the primary underpinning of the Act. Rather, this change would allow a possibility of compliance with the law through an alernate means which is equally valid-- a showing of no harm. I would not expect there would be an en masse rush by industry to use this mechanism. Indeed, I would expect that the tests to receive such a modification would be tough and extensive--but realistic.

Some would suggest that Congress side-step this issue until final BAT guidelines are published. This, however, would allow the Act to be reauthorized without a BAT modification provision. Once BAT guidelines are promulgated, the law would force industry to install mandated BAT technologies since no other option would be available. Therefore, Congress must examine the issue during this reauthorization.

PRETREATMENT

The final issue I would like to deal with under standards and deadlines is that of pretreatment. I know the Committee will deal with this issue in some detail later in the hearings so I will just attempt to set the stage for that discussion.

Pretreatment requirements were established by Congress in 1972 to prevent industrial pollutants from interfering with the proper operation of publicly owned treatment works, and to prevent the pass-through of toxic pollutants into receiving water. Later, the law as amended in 1977 also authorized EPA to develop national technology-based pretreatment standards for toxic pollutants.

The pretreatment requirements once again go to the heart of the problem with this and other environmental statutes--complexity. The requirements of this program boggle the mind.

Anyone associated with the program can tell you about the extraordinary delays associated with its development. Little progress has been made thus far on pretreatment. Prior to the development of the EPA regulations, a number of municipalities were developing effective pretreatment programs which were far simpler than those being considered by EPA. EPA rejected those efforts to establish pretreatment controls, requiring instead that municipalities attempt to put into effect a complicated scheme under which the requirements on each industry would vary depending upon the pretreatment regulations subsequently promulgated by EPA.

This approach proves to be unworkable in practice. Nothing constructive is being done on pretreatment, and industry could be faced with redundant treatment requirements, or municipalities could be faced with industrial discharges with inadequate pretreatment.

In its review of the law, Congress should reassess its position on having EPA require such a complicated program, orchestrated out of Washington. It would appear, based on experience, that pretreatment would be handled better if it were turned back to the states and municipalities so they can develop their own specially-tailored pretreatment programs. EPA should continue to play a strong role in providing technical guidance to the municipalities that need it. Ultimately, protection of the environment derives from the enforcement of the POTW's permit.

In addition, Congress needs to make it clear that it is not the intent of the pretreatment program to require redundant treatment of compatible pollutants or to encourage municipalities to substitute pretreatment for acequate capacity or proper maintenance. Unfortunately, in the 1978 general pretreatment regulations and again in 1981, EPA has encouraged cities with inadequate and poorly operated facilities to force pretreatment on some of their customers, rather than correct the problem in their facilities.

The objective should be to establish a simple and effective pretreatment program to meet water quality goals. And, while simplicity may not be able to cover every contingency that can arise, it does assure that the program will not be mired in red tape.

PERMITS

I would now like to discuss the permitting aspects of the Act. We should be looking for opportunities to streamline the permitting process to improve the administrative workability of the law. Section 402 has been described as the backbone of the Clean Water Act. It establishes a procedure by which point sources discharging pollutants to navigable waters receive permits authorizing the discharges. Point source discharges of pollutants to navigable waters of the U.S. are unlawful without applicable permits issued either by the federal government or by states delegated the permits program.

One cannot look at this program without being staggered by its scope. Today, it is estimated that EPA is facing approximately 60,000 permit applications. Of the initial permits issued in the program, 44,000 were granted without final effluent guidelines and must be modified when those guidelines are promulgated. Indeed, there are many dischargers today that have been waiting for permit decisions since 1972 because of this enormous backlog.

The cause of this enormous logjam is multi-faceted. Permit applicants and permit writers alike can agree that many of the requirements of the Act place unreasonable burdens upon both regulators and the regulated.

Following are a few examples:

DeMinimis Discharges

The Act requires that a NPDES permit must be obtained for a point source discharge even if the discharge is small or contains only minute quantities of benign pollutants. In short, every source discharging water requires a permit. This is significantly different than such laws as the Clean Air Act which regulates sources only above certain size limits.

The NPDES permit program imposes time-consuming requirements not only on industry but upon permit-issuing authorities. Implementing regulations are complex and can require considerable effort and expense. The permit process may take months, and in some cases, years. In many cases the discharge is of little or no consequence to improved water quality but a permit is still required. For example, the law is so rigid that a permit is required for uncontaminated stormwater runoff channeled into ditches around an industrial plant.

Nearly everyone involved in the administration of the law acknowledges that a significant portion of the 60,000 permits involves insignificant sources.

It appears sensible to direct the Clean Water Act efforts of government and industry toward cleaning up significant pollution of the nation's waters, without unnecessary time, money, and attention aimed at permits for insignificant discharges. EPA is moving in this direction by setting priorities for renewal. But more can be done to unclog the system.

If discharges are de minimis, based on concentration, volume and type of discharge, and are insignificant to the protection of water quality, EPA should be given the flexibility to exempt sources or categories of sources from NPDES permit requirements.

NPDES Permit Life

Under the present law, NPDES permits must be renewed every five years even though it frequently takes more than one year for the final permit to be issued and up to three years to install treatment technology. A five-year permit life allows little time for the permit holder to test the effectiveness of the treatment before the permit renewal application process begins again. The need for renewal of permits every five years, or even more frequently in many instances, subjects EPA and the state agencies to substantial administrative burdens especially when considering the volume of permits in the system.

There is a growing consensus that the maximum allowable life of a NPDES permit should be extended from five to ten years. A 1980 House Subcommittee on Oversight and Review report titled "Implementation of the Federal Water Pollution Control Act" states that lengthening the period for which a permit remains valid will "provide greater stability and certainty to the NPDES program." It also said that extending the permit life "would allow

a more effective utilization of the overburdened regulatory staffs of the EPA and the States."[2]

There has been some criticism that by extending the maximum allowable permit life to 10 years, control technology and other permit requirements would be frozen for a 10 year period. This simply is not true. Permits have been and should continue to be subject to reopener provisions which allow either the agency or the permit holder to revise permit requirements when circumstances change. In many instances permits would continue to be issued for shorter periods of time, in some cases at the request of the applicant.

National Environmental Policy Act

Under current provisions, before it can issue an NPDES permit for a new source, EPA must conduct a National Environmental Policy Act (NEPA) review and may be required to prepare an Environmental Impact Statement (EIS). These requirements are time-consuming and result in unnecessary expense for the agency and the applicant. This is a equirement which has outlived its usefulness and should be eliminated.

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2. U.S. House of Representatives, Committee on Public Works and Transportation, Subcommittee on Oversight and Review, December, 1980, "Implementation of the Federal Water Pollution Control Act," Committee Print 96-71, U.S. Government Printing Office, Washington, DC.

The intent of NEPA is to ensure that all federal agencies will evaluate the environmental impact of their actions. This kind of supervision makes sense for an agency that might not otherwise consider environmental factors. However, because the environment is EPA's primary concern, it seems unnecessary to require a review to show that EPA has examined the environmental consequences of issuing a water pollution permit.

There is also an inconsistency under the existing program. New source permits which are issued by EPA require the preparation of an EIS. New source permits issued by the state through federally delegated NPDES programs do not require the preparation of an EIS. Are state-issued permits any different from federally-issued permits?

Congress, under the Clean Air Act and the Resource Conservation and Recovery Act (RCRA), has already recognized that NEPA should not oversee EPA's issuance of permits. Would it not seem logical that the same exemption should apply to permitting of new sources under the Clean Water Act? Once again, this would rid the system of unnecessary paperwork.

More importantly, much of the information required for an EIS will be developed under other environmental statutes. Thus, the EIS requirement is redundant.

Agricultural Stormwater Runoff

Stormwater discharges from agricultural water management systems become subject to Clean Water Act Section 402 permitting requirements under the definition of "point source" in Section 502(14). Under this definition, structural and mechanical water management systems which handle stormwater in flat land areas become point sources, even though the discharge is similar to discharges which are not confined (e.g. stormwater which moves in natural flow patterns). This creates another burden for an already overloaded permitting system.

Agricultural stormwater's impact on water quality may be inevitable and often non-abatable because it's associated with episodic hydrologic conditions of short duration. A water management system which abates pollution loading within water quality standards 80 to 90 percent of the time may not meet water quality standards during intense storm events. These systems are, however, susceptible to Best Management Practices which are practicable and economical, as shown by 208 program results.

The solution to this problem is to amend the definition of point sources in Section 502(14) to exclude all agricultural stormwater discharges. This should be done with the understanding that existing authority and support should be continued for state and local programs (under Section 208 of the Act) to control non-point source pollution which is identified as a water quality problem in local areas. Stormwater runoff from agricultural lands in most

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other areas is subject to regulation under Section 208. This redefinition would treat all agricultural runoff in the same manner. A similar change was enacted in 1977 for irrigation return flows for virtually the same reasons.

To summarize my remarks on permitting, it would be unfair to characterize the NPDES permitting program as ineffective. Significant discharges of water pollutants are now being regulated through this program. But it is a program that burdens due to its sheer size, and overwhelms the administrative capacities of the federal and state governments. Especially at a time of diminishing administrative resources, we should be looking for ways to eliminate unnecessary paperwork. The suggestions I have made here deal with the realities of the situation and suggest several changes that might rid the system of inconsequential discharges and unnecessary or redundant paperwork. I do not believe that any of the changes here would adversely affect water quality, but they would substantially unburden the regulatory process.

GOALS AND OBJECTIVES

Before concluding, I would like to touch on the goals of the Act and how they relate to the operation of the law. Specifically, I would like to focus on the goal of achieving zero discharge by 1985. This goal appears to be unrealistic. It is a provision Congress should look at carefully to see if its makes sense for our future.

One factor which suggests that zero discharge does not make sense is the principle I call the Declining Bottom Line. Ten years ago when the law was passed, zero discharge of pollutants would mean reducing pollutant levels to nondetectable levels which, in some cases, would have been measured in parts per million. Ten years later, our analytical capability has increased severalfold. Today we can measure some pollutant levels down to parts per trillion -- enter the Declining Bottom Line. A practical affect of this situation is that we can be discharging the equivalent of drinking water, in some cases, and still not be meeting the goal of zero discharge. Although I discussed the effect at length in testimony before the House Committee on Public Works in 1976, I do not believe this was anticipated either in 1972 or 1977 when Congress reviewed the law.

Another factor is what I call the "There Ain't No Such Thing as a Free Lunch" theory. This suggests that zero discharge, from an environmental standpoint, may not be desirable. Consideration must be given to the ultimate disposition of pollutants. Assuming that the goal could be met, in certain cases attainment of zero discharge in water would simply mean that the pollutant was being transferred to another place in the environment: air, land or geological formations. It doesn't dissappear simply because you have taken it out of the water.

The problem of shifting pollutants from one medium to another by enforcement of the zero discharge goal is illustrated by the publication of proposed BAT guidelines containing a zero discharge requirement for the paint manufacturing industry. Those regulations,

which would affect 748 facilities, are aimed at removing only 300 pounds per year of BAT pollutants from the wastewater discharge of the average facility. Removal of the BAT pollutants, however, would produce more than one ton of solid waste for each pound of pollutant removed. Thus, in removing more than 300 pounds per year of BAT pollutants, more than 300 tons per year of solid waste -- waste which will be transferred to the land -- would be produced.

Some defend the zero discharge goal by arguing that it is merely academic or symbolic and does not affect permit decisions. Experience has shown otherwise. Permit writers often consider zero discharge when setting new permit limits. Zero discharge of process wastewater has been required for BPT, BAT and NSPS for a number of industries. It is anything but academic.

Finally, the 1985 date for attaining zero discharge cannot be met and should be eliminated. I am not suggesting that the zero dischage goal be eliminated at this time. I don't believe that all the facts have been collected on the feasibility or desirability of this provision of the Act. What I am suggesting is that Congress put a hold on that goal by deleting the 1985 deadline which is not feasible in any event. At the same time, Congress should require a study of the feasibility, desirability and consequences of the zero discharge goal. The report on the study should be made available to Congress prior to the next reauthorization of the Act. At that time, Congress can determine the fate of that goal.

CONCLUSIONS AND OBSERVATIONS

What we should strive for are several principles. First, we should keep it simple in administration. Let's not tie up our resources in hassling over complicated programs which don't result in pollution control. Second, let's be realistic. Don't be overly ambitious in the goals we set for ourselves, or the deadlines we set for meeting those goals.

Unrealistic expectations frustrate both the government and the public, and not enough gets done. I am not saying we should not keep pressure on to continue progress, but we should be realistic in our expectations. Third, and finally, the law should be flexible enough to deal with unique situations and give those implementing it some leeway in applying its requirements.

Thank you for your attention.

# # #

NRDC
Clean Water

OVERVIEW OF PROPOSALS TO AMEND
THE CLEAN WATER ACT

J. Taylor Banks
Senior Attorney

before the

Senate Subcommittee on Environmental Pollution

of the

Committee on Environment and Public Works

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Natural Resources Defense Council • 1725 Eye Street NW Suite 600 • Washington DC 20006 • 202/223-8210

Today's hearing opens another important chapter in the continuing review of our Nation's progress toward achieving clean water. We have come a long way under a decade of strong Congressional leadership, but the toughest, most crucial stretch of the road lies just ahead: in these hearings, you will be examining the pace and the scope of our national program to control toxic water pollution.

Environmental organizations have a simple, straight-forward message for Congress as it begins the reauthorization process.

> YOU HAVE DONE YOUR JOB WELL. THE CLEAN WATER ACT DOES NOT NEED TO BE CHANGED. IT SHOULD BE REAUTHORIZED, WITHOUT MAJOR AMENDMENTS, FOR AT LEAST FOUR YEARS.

The American public wants a strong Clean Water Act. Over 90 percent of the citizens responding to a recent Harris survey either supported the Act as it stands or wanted it strengthened -- even considering the costs of pollution controls. The public looks to Congress, and particularly to the Senate's Environment and Public Works Committee, to carry out that mandate.

We urge Congress to maintain its leadership and control of clean water policies. To do that, we believe you must reject the Administration's and industry's proposed amendments. The EPA/industry agenda is unnecessary and unworkable. It would cripple a good statute. It would return to failed policies of the 1960's that Congress rejected ten years ago. It makes no sense, and we oppose it absolutely.

We have discussed the major facets of EPA's proposal in two detailed, written analyses. Copies of these have been provided

to the staff and are offered for the record of these proceedings -- with the Chairman's permission.* In addition, we will address the most controversial EPA and industry proposals as part of separate panel discussions scheduled before the Committee in the coming days.

The forest sometimes is hidden by the trees, however, and for that reason we appreciate the oportunity to provide the Committee an overview of our perspective on the Act and on the various proposed amendments.

By most accounts, the country's surface water has not deteriorated significantly due to conventional (oxygen depleting) pollution in the last 10 years. Despite substantial growth in population and increases in industrial output, we seem to have held our own. Even some dramatic improvements are apparent in specific water bodies around the nation.

By contrast, the jury is still out on toxics. Water monitoring programs are neither comprehensive nor accurate enough to determine whether or not we have widespread, or even significant local toxics problems. Specific controls have not been implemented for industrial discharges of toxics, and scientists still cannot agree on how much of a given chemical is likely to be harmful to aquatic life and human health. EPA speculates that some toxics probably are removed incidentally by treatment systems designed for conventional pollutants. But even EPA cannot say how much remains or, more importantly, whether the

* "Analysis of EPA's Proposed Amendments to the Clean Water Act," dtd. April 9, 1982; "Supplement," dtd. July 21, 1982.

amount still discharged is safe in any given situation.

What we do know is that toxic metals and organic chemicals are discharged to our waters by the ton every day. EPA's technical staff has estimated that for every year industrial controls are delayed under this statute, nearly 300 million excess pounds of toxic pollutants will be needlessly poured into America's waterways and sewer systems. That figure represents the difference between current discharge levels (412 million pounds annually) and those expected after industrial sources meet their projected requirements (128 million pounds annually). If EPA's figures are correct, then today, July 21, 1982, over 800,000 excess pounds of these pollutants will be discharged. In the hour or so we discuss these matters this morning, about 17 tons of excess toxic chemicals will be discharged by American industries.

These are chemicals that cause cancer, birth defects, and have other toxic effects an aquatic life and humans. Some of them accumulate through the food chain or build up in river sediments -- causing problems for years to come and sometimes in distant locations. At 17 tons an hour, we think that is a problem worthy of your attention.

Stripped to the essentials, these hearings must address the question of what to do about those toxic chemicals in the absence of detailed knowledge about their effects in the aquatic environment. To one side are environmental organizations and the public; we think Congress was right in 1972 and 1977 when it required action, through technology based requirements, in the

face of uncertainty about toxics. On the other side, EPA and industry propose a variety of amendments that would reverse Congress' policy by taking a wait-and-see approach to toxics control.

In our view, Congress would be making a serious, perhaps tragic mistake if it accepted the EPA/industry proposals. They are fundamentally at odds with the Clean Water Act and with ordinary prudence. They are not the minor adjustment Dr. Hernandez makes them out to be -- subtle, yes; minor, no.

Congress has not reached its current policy lightly or by happenstance. The Clean Water Act was devised in 1972 (and adjusted in 1977) after lengthy, serious attention to the lessons of the past. The Act emphasizes national, uniform technology based controls on toxics as the only workable, equitable means of ensuring prompt cleanup. Why? Because:

o Congress recognized that toxics are a serious national problem in need of urgent attention. We may not know precisely where or to what degree all toxic hazards exist, but neither do we need that knowledge to make prompt, significant strides toward addressing the problem.

o Scientists and engineers are not capable of devising and implementing accurate, ambient-based controls on toxics. Congress saw from the experience of the 1960's that predicting water quality problems and then tailoring controls to solve them was beyond EPA's and the states' capacity. It was true then for conventional pollutants; it is even more apparent now for toxics. Just last year, EPA's head of research and development

estimated that EPA and state decision makers will not have the scientific tools to make those predictions until 1990 -- even if EPA's R&D budget were to stay at the FY 1981 level and not lose its impact due to inflation.

o It is a simple fact of life that site-specific, ambient-based decision making is subject to powerful political pressures and shopping for "pollution havens" that ought not be a part of the Clean Water Act's regulatory scheme. These pressures not only result in weaker controls, but endless, expensive administrative and judicial proceedings. Nationally uniform standards may not be perfect, but they avoid these serious deficiencies.

Having considered these matters and shaped our national policy accordingly, Congress should demand that any proponents of change now carry a heavy burden of proof. You don't reverse a decade of progress without compelling reasons, and we very much appreciate the Chairman's clear statement of that principle on several occasions.

We think the EPA/industry agenda fails totally to carry the burden. It proposes changes that are not needed, that will not work; and that have not been explained or justified.

You have heard Administrator Gorsuch and Dr. Hernandez repeatedly characterize the EPA proposals as minor, or fine tuning amendments to the statute. <u>They are not</u>. In combination, EPA's amendments will make <u>major</u> adverse changes to the law. They present large, serious questions of policy and should be viewed in that posture -- not taken lightly as mere adjustments.

Accordingly, the Committee needs to understand and appreciate the results that really would occur with these proposed amendments -- not just on their face, but between the lines drafted by EPA's legislative craftsmen. There are subtle, yet devastating changes in these amendments -- such as removing Congress' "decision rules" for certain standards -- that must be understood fully.

Here are the highlights of our concerns about the EPA/industry agenda. Each of the following proposals would undercut Congress' emphasis on prompt toxics control, subvert Congress' reliance on nationally uniform requirements, or limit the Act's ability to address known pollution problems.

1. BAT Deadlines

EPA proposes two deadline changes: (a) one to extend its own obligation to issue regulations; and (b) one to give major industrial sources 4-6 more years to comply with BAT requirements. Neither of these changes is needed. EPA has promised a federal court it can and will issue BAT regulations much sooner, and industry needs only about 3 years to meet its requirements. Using EPA data, we estimate that the Agency's proposed amendments would cause 170 million excess pounds of toxics to be discharged because of unneeded delays.

That is an unacceptable result. In my testimony tomrrow afternoon, I will discuss an alternative amendment that would save that 170 million excess pounds of toxics, treat all industries equally, and attenuate EPA's resource requirements for permitting.

2. Pretreatment Program

EPA wants to eliminate both its duty to issue pretreatment standards and any deadlines for Agency action. In addition, EPA would add new exemption procedures under which industries and cities could escape the application of any standards the Administrator chooses to issue. EPA could grant exemptions simply because a city promised that it had an adequate substitute for the comprehensive federal program (i.e., no detailed review and approval would be necessary).

This proposal turns a system now based on uniform technology-based controls into the old case-by-case ambient-based system of the past. It will fail just as the programs of the 1960's failed and led to the 1972 law.

We oppose each of these provisions. The pretreatment program can be made to work with administrative changes to such things as the removal credit. What we need are the standards and regulations that EPA continually delays and, in some instances, suspends. Tomorrow, Fran Dubrowski, NRDC Senior Attorney, will explain the numerous problems with EPA's proposed amendments.

3. Ten-Year Permits

EPA proposes that permits last for 10 years rather than the customary five. This would freeze treatment requirements for a decade -- even if new standards are developed, new chemical hazards are discovered, or better treatment technologies emerge.

The Agency has not justified this amendment, and certainly has not carried the heavy burden of persuasion accompanying such a drastic proposal. We oppose it because it is both unnecessary

and counter to the Act's focus on progressively better toxics treatment at reasonable intervals.

4. Special-Interest Loopholes

EPA's agenda includes several amendments by request. There is a break for electric utilities that eliminates technology-based standards for heat. The Department of Energy convinced EPA to pursue wider exemptions for DOE weapons plants. And the Navy has an amendment that would allow it to bomb waters near Puerto Rico without permission from the State agency. We oppose each of these amendments.

5. Definition Fixes

By simply changing key definitions in the Act, EPA hopes to reverse its losses in recent federal-court litigation. The Agency proposes to define away the problems caused by dams and to reduce the number of new sources that are subject to standards of performance. Neither change is necessary.

Again, these dilemmas can be solved by administrative action and by prompt issuance of EPA regulations. We hope Congress will refuse to become a partner in EPA's attempt to make its responsibilities disappear.

6. BAT Variances -- The Hidden Agenda

Industry representatives -- particularly the Chemical Manufacturer's Association -- have proposed a variance provision for BAT regulations on toxic pollutants. EPA decided for political reasons not to propose it, but supports the concept in principle and threatens to raise it next year if Congress does not pass a reauthorization bill in 1982.

We urge Congress to reject CMA's plea, as it did in 1977 when §301(l) was added to the Act to specifically forbid toxics variances. In my testimony tomorrow, I will show the Committee with EPA's own data and documents that such a waiver is neither necessary nor feasible.

* * *

In summary, we urge Congress to reauthorize the Clean Water Act without the overhaul EPA has proposed. The statute works reasonably well because Congress designed it and maintained it according to sound principles of public policy. It will continue to work only if Congress retains those principles and insists that EPA carry them out.

NRDC
Clean Water

Analysis of EPA Proposals for Amending The Clean Water Act

April 8 1982

J. Taylor Banks
Fran Duprowski
Michael Bacon

Natural Resources Defense Council • 1725 Eye Street NW Suite 600 • Washington DC 20006 • 202/223-8210

SUMMARY

1. The Pretreatment Retreat

EPA proposes to: (1) abandon mandatory, national pretreatment standards for toxic industrial discharges into municipal sewage plants; and (2) create waivers for any industries that EPA may choose to regulate. This is a major retreat from the Act's emphasis on uniform treatment technology for industrial toxics. The proposal would eliminate long-standing federal leadership in this area, and place enormous financial and political burdens on the cities by requring scientific and technical investigations for which there are not enough data, methods or technical resources. As a result, the serious toxics problems caused by these discharges will continue.

2. Rollback of BAT Deadlines

EPA proposes to: (1) delay its duty to issue "best available technology" (BAT) regulations for toxics until July 1, 1984; (2) remove its obligation to review BAT rules every year; and (3) roll back industrial dischargers' compliance deadline from 1984 to 1988. These amendments are designed to undermine EPA's court-ordered responsibilities on toxics control, and to give industry an inordinate stretchout of their obligations. EPA has promised a U.S. District Court that it can issue all of the regulations before 1984 -- some as soon as this Spring. Moreover, while dischargers usually need 2-3 years to comply with a rule, EPA's proposal will grant them 4-6 years. For each year that BAT regulations are delayed, EPA has estimated that over 100 million pounds of toxic chemicals will be discharged to the Nation's waters. This is far too high a price for EPA's unjustified delays.

3. Ten-Year Permits: No Further Progress for a Decade.

EPA proposes to increase the maximum term of all Clean Water Act permits from 5 years to ten. This increase will ensure that polluters are protected from more stringent requirements under the Act for a decade. There will not be opportunities to require upgraded treatment -- even if justified by advances in technology, cost-saving innovations, discoveries of new toxics hazards, or decisions by states to increase the protection of their water resources.

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4. A Larger Loophole for Federal Facilities.

EPA proposes to expand the President's existing authority to exempt federal polluters by: (1) making such exemptions available for toxics; (2) increasing the legnth of exemptions from one to 3 years; and expanding the authority to cover non-military facilities such as DOE weapons plants. These exemptions are not available for private companies. EPA's proposal creates a loophole in the Act's toxics control program that is not justified by any demonstrated need.

5. Defining Away the Problems Caused by Dams.

EPA proposes to exempt dams from the Act's requirements by simply defining them as "non-point" sources. Discharges from dams cause serious water quality problems, including low oxygen levels that kill fish, sedimentation, depressed temperature and supersaturation. EPA could address the thousands of dams that cause these problems by issuing general permits or broad regulations. Instead, the Agency plans to relegate dams to the now-defunct and bankrupt planning process called 208. The proposal is a non-solution to a serious problem.

6. Making New Sources Into Old Sources.

EPA proposes to apply stringent "new-source performance standards" for toxics only to facilities that commence construction after the standards are issued in final form. These standards can utilize the latest innovations because they do not require retrofitting on existing facilities. The Act now applies those standards to any facility that starts construction after proposal of the regulation. EPA often takes years to promulgate a regulation after it has been proposed, and this amendment would exempt all facilities built during the interim. Where a regulation does not change materially between proposal and promulgation, there is no reason to exempt these sources fron the only standard in the Act designed specifically for plants that are built from the ground up.

7. Relaxing Thermal Discharge Requirements.

EPA proposes to abandon the Act's guarantee that thermal discharges will not undermine the "protection and propagation of a balanced indigenous population of shellfish, fish and wildlife." EPA would provide variances from uniform controls on power plants wherever the thermal discharge satisfies state water quality standards. State standards offer far less

protection than the statutory baseline, and are the targets of EPA plans to downgrade and weaken controls even further in the coming months.

8. Lower Authorization of Funding.

EPA proposes to set the authorized funding level for FY 1983 at the amount requested in President Reagan's FY 83 budget. The budget amount is 17% below the Reagan FY 82 budget, which itself represents drastic cuts from prior years. This proposed authorization comes nowhere near the amount needed to carry out clean water responsibilities at the federal and state levels.

9. Non-controversial Amendments.

EPA also proposes to: (a) allow states to assume only partial authority to operate permit programs under the Act; (b) give cities 12 months to apply for stretchouts of their compliance deadlines; (c) collect fees from polluters for processing waivers and exemptions under the Act; (d) give itself authority to assess penalties in administrative proceedings; and (e) add felony sanctions to the Act for negligent or knowing violations that may cause injuries, or for knowing falsification of reports and tampering with monitoring devices.

ANALYSIS

EPA has proposed a 14-point plan to amend the federal Clean Water Act. The plan was sent through inter-agency review by the Office of Management and Budget on March 23, 1982. This analysis does not reflect any changes that might be made by EPA in response to comments by other agencies.

Eight major amendments proposed by EPA would cause drastic, complicated changes in the Act's provisions for controlling toxic industrial discharges into municipal sewers and the nation's waterways. Together with administrative actions already underway at EPA, and with far-reaching amendments proposed by industrial trade associations, these amendments systematically delay and dismantle some of the Act's most important programs. They will mean less pollution abatement, greater administrative burdens on state and local authorities, and serious delays in meeting the Act's objectives.

The discussion below addresses the 14 provisions of the proposal EPA sent to OMB. We consider in detail each of the eight major amendments, and then describe briefly several non-controversial proposals contained in the EPA package.

1. The Pretreatment Retreat.

A. Background

The national pretreatment program is intended to curtail toxic discharges into municipal sewers and treatment plants by over 60,000 industrial sources. These sources are responsible for as much a two-thirds of the heavy metals

entering municipal plants, and much greater amounts of other highly toxic chemicals such as cyanide, phenol, and ethyl benzene.

Toxic chemicals cause three kinds of problems when they are dumped into sewers. PASS THROUGH: they can travel through a municipal plant into the receiving waters -- virtually untreated by conventional systems that were designed to handle only domstic sewage. UPSET: they can interfere with municipal plant operations -- upsetting biological treatment processes, causing enormous, untreated discharges of toxic chemicals and domestic sewage, and costing millions of taxpayer dollars to correct. SLUDGE CONTAMINATION: they can contaminate the sludge produced in municipal treatment plants -- rendering it unsafe (without further, costly treatment) for environmentally beneficial disposal such as land spreading.

For these reasons, Congress created the national pretreatment program in 1972, and directed EPA to implement its provisions as expeditously as possible. The program's cornerstone is a system of mandatory pretreatment standards for each of the primary industrial categories. These "technology based" standards merely require industrial sources to use the best treatment technologies and controls they can afford. Pretreatment standards should have been issued by 1980 so that industrial dischargers could meet them by 1983.

The standards are to be implemented by municipal

authorities (through ordinances, local permits, etc.) after making adjustments (called removal credits) to relax the standards by whatever amount of toxics removal actually (although unintentionally) occurs in the municipal plant.

Although this program was nearly on line by the end of 1980, the Reagan administration stopped pretreatment in its tracks early in 1981. Out of over 20 major industrial categories, EPA has issued only two pretreatment standards (Electroplaters and Timber Products), and some portions of those have been stymied by other regulatory developments. Most important, the "general pretreatment program" regulations were suspended for over a year. First issued in 1978 and re-issued in 1980, these rules govern local responsibilities, removal credits, variances and the like. On OMB's orders, EPA suspended them to conduct a regulatory impact analyses leading to the legislative proposal discussed below.

B. EPA's Proposal.

EPA proposes to change the pretreatment program in three significant ways:

i. Pretreatment standards would become discretionary rather than mandatory. EPA no longer would have a statutory duty to issue standards for any industry, or any toxic pollutant, by any particular deadline.

ii. Waivers could be given for any pollutant in any standard EPA decides to issue. These are not "variances"

(to relax standards), but all-or-nothing decisions whether to require any pretreatment at a municipal plant. Municipal operators would not even have to apply for these waivers until two years after the industrial standards are issued.

iii. Program requirements for cities (now contained in the general program regulations) would continue in effect. Those regulations are being overhauled by the administration; this proposal not only would suggest Congressional approval of the changes, but give EPA unlimited time to complete the overhaul.

C. Discussion.

Curtailing (or even delaying) the pretreatment program will carry a very heavy environmental price. According to EPA data, the issuance of standards for 21 major industrial categories would reduce discharges of toxic metals to sewers from 56 million pounds per year to only 9.6 million. Similarly, EPA estimates that by controlling 16 of these industries, annual discharges of toxic organics to sewers will be reduced from 190 million pounds to 61 million.

In total, the difference between issuing standards and withholding them could be over 175 million pounds of toxic pollutants each year -- for as long as they are delayed. The resulting discharges to waterways, interference at municipal plants, and sludge contamination will be significant.

EPA claims that these results can be overcome with a program aimed at local initiative and responsibility. The EPA proposal depends on the ability of cities to: decide where toxics controls are needed; develop these controls on their own; persuade industries to comply; and enforce compliance if necessary. A few cities can accomplish those objectives, but most municipal authorities haven't the expertise, resources or political muscle even to begin. If they cannot accomplish effective pretreatment, then treatment of industrial wastes at the municipal plant will be the only remaining solution -- and that solution means billions of federal taxpayer dollars to effectively subsidize industrial operations.

i. Discretionary standards

EPA's proposal to make pretreatment standards discretionary will accomplish two things. First, EPA will have a better chance of escaping from court-ordered responsibilities to issue standards covering the primary industries and the worst toxics discharged by those industries. Second, the burden of cleaning up these "indirect" toxic discharges will be passed to local authorities -- whether they are equipped to handle the job or not.

EPA has been under court order since 1976 to promulgate these standards. The lawsuits resulting in that order were filed after EPA failed to issue any standards from 1972 to 1975. NRDC and other groups were able to bring these suits

only because EPA's duty to comply with the law is mandatory.

Since then, EPA has produced only two industrial pretreatment standards. The standards were due under the court order in 1979, but on three occasions EPA has asked for long extensions. Most recently, the Agency requested until mid-1984 to complete these rules -- even though the technical work and data gathering is finished.

EPA's proposed amendment could eliminate all means of keeping pressure on the Agency to issue these standards. If Agency officials chose to ignore the federal role in pretreatment altogether, it might be beyond the reach of federal courts to reign them in. Given EPA's track record and this administration's fear of federal regulation, we would see no more pretreatment standards.

EPA's current position is that upsets and sludge contamination can be addressed solely by the cities under local program requirements, and that the bulk of pass-through problems can be alleviated by issuing standards for only two industries (Metal Finishers and Organic Chemicals produucers). The Agency is wrong for several reasons. First, pretreatment standards are necessary to deal with upsets and sludge. They serve as insurance against the (now demonstrated) likelihood that cities cannot solve these problems on their own. Second, EPA has not shown that regulations for two industries will reduce toxic pass-through to acceptable levels. EPA data show

that 35 million pounds of toxic metals and organics would still be discharged to receiving waters under those regulations each year, and another 72 million pounds would enter municipal sludges. Moreover, those estimates assume unrealistically high rates of toxic removals by the municipal plants that cannot be expected to occur nationwide -- especially after EPA relaxes secondary treatment requirements (discussed below).

The upshot is that EPA hopes to place almost all pretreatment responsibility and resource burdens on local governments. A few large cities (Los Angeles, St. Louis and others) have done reasonably well on their own. But EPA estimates that at least 2,000 municipal plants need effective pretreatment programs. The EPA proposal will eliminate any hope of meaningful federal assistance or leadership in establishing those programs.

According to a recent study of cities that have implemented pretreatment programs, federal requirements are the primary motivation for developing those programs. For example, the Washington Suburban Sanitary Commission recently commented to EPA that the existing pretreatment program, "while establishing an important national policy for the control of nondomestic wastes discharged to [municipal plants] provided WSSC with the impetus to develop a formal pretreatment program." And another municipal authority, reacting to EPA's suspension of the general program regulations, stated, "we feel efforts would be

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this guessing game; industries will not even know whether they will be regulated, let alone when or to what degree.

Second, most cities do not have the technical resources, research capability, or administrative staff to devise and implement pretreatment controls. EPA is banking on the cities to decide: whether pretreatment is needed; which industrial sources to control; and the degree of treatment required to protect stream quality, plant operations and sludge. All of these questions are difficult and resource-intensive, and that is why Congrses chose to address them under mandatory, national pretreatment standards.

Without pretreatment standards and federal resources, the cities will flounder. There are few toxics stream standards and no sludge guidelines for cities to use as benchmarks in deciding whether to control industrial sources. One quarter of all municipal plants have interference and upset problems (for which they blame industrial users), but almost none of the plant operators knows the real cause or source. Nearly 90 percent of the plants in one recent study reported sludge contamination caused by industrial dischargers, but one out of three had no quantitative knowledge of the problem. And only one in three municipal plants even monitors its influent for metals or toxic organics.

The need to gather this knowledge comes as no surprise. Cities have had these responsibilities -- and complete legal

freedom to carry them out -- for several years. The fact that many have not met the challenge indicates that they are unable.

In sum, the cities are not uniformly capable of maintaining a strong pretreatment program, and EPA appears to be unwilling to meet its obligations. The one way to ensure that this program gets off the ground is to retain EPA's mandatory duty to issue national standards.

ii. Waivers

If EPA decides to issue standards, the Agency's proposal then affords industries a second bite at the apple -- an opportunity to have their standards waived. EPA's waiver provision would result in tremendous administrative burdens on permit agencies, and produce long delays in compliance. The waiver supposedly would be granted only where pretreatment standards are not "needed." In reality, the proposal depends on determinations of need that either cannot be made, or that easily can be adjusted to produce an illusion that pretreatment is unnecessary.

(a). Resource burdens.

Processing these waivers will require enormous commitments of resources by state and local governments. Over 60,000 industrial facilities discharge into municipal plants, but if EPA chooses to regulate only Metal Finishers and Organic Chemicals and Plastics producers, over 10,000 dischargers could be involved. If only a fraction of these sources seek waivers,

the administrative burdens, red tape and delays will be enormous.

EPA has estimated the resources it would take to process permits with waivers from "best available technology" (BAT) effluent limitations. The Act requires that pretreatment standards be analogous to BAT. Since EPA's proposed pretreatment waiver is at least as scientifically complex as a BAT waiver, these estimates are useful for predicting the burdens associated with EPA's proposal.

Using EPA's estimates, permit writers could be required to invest up to 8 work months for an uncontested proceeding, and over 40 work months if the proceeding drags through administrative and judicial hearings. If only 2,000 pretreatment waivers are sought, and only half are contested, the resources would run up to 4000 work years just to handle the technical and scientific investigations, and of course the paperwork. Over a five-year period, it would take about 800 professionals to handle such a burden.

EPA also has some direct experience with waiver-type proceedings. The Agency has considered a number of variance applications under its permit regulations, and the experience led to some sobering predictions. A recent EPA memorandum, for example, observes that:

> EPA action on variance requests is highly resource intensive, and a significant increase in the number of variances would serve to upset

> permitting priorities and our ability to reduce the backlog of expired industrial permits. The Office of
> Water Enforcement and Permits estimates that consideration of a major industrial variance requires 65
> work-days per permit. Together with the time needed to draft the initial permit, this would triple the resource requirements for each permit. (This does not include any estimate of resources required to defend Agency action in evidentiary hearings or court challenges.)

These estimates are for variances that are quite simple compared to the waiver being proposed by EPA.

Finally, EPA's pretreatment waiver is not unlike the development of case-by-case discharge permits under the Act based on "Best Professional Judgment." These BPJ permits are the only way a state has to regulate chemical discharges when EPA fails to issue uniform, industrial effluent limitations. Thus far, almost all states have refused to undertake this task, and instead have simply "rolled over" old permits for non-toxic pollutants that were developed in the early 1970's. State officials say they have neither the technical resources nor the ability to withstand lawsuits. They are waiting on their federal partner to issue uniform regulations.

(b) EPA's Waiver Conditions

The conditions in EPA's proposed waiver appear calculated to generate controversy and delay. They require decisions for which there are no suitable benchmarks and for which administrative manipulation would be easy. These problems --

together with the two-year grace period before applications are even due -- guarantee that pretreatment standards (if any are issued) will not be met for many years.

The EPA waiver provision has five primary conditions; a waiver would be granted if:

1. The municipal plant is in compliance with secondary treatment, water quality standards, general pretreatment program requirements and, if applicable, ocean discharge criteria.
2. Designated uses for the receiving waters are being attained by the municipal plant, and will be maintained under the waiver.
3. The waiver would cause no interference with sludge use and disposal guidelines.
4. The waiver will not subject any other source (direct, indirect, or non-point source) on the waterway to additional requirements.
5. Existing water quality will not be degraded.

These conditions might appear to be fairly strict -- until one examines their bases and EPA's stated plans to manipulate them.

Compliance with secondary treatment. No waiver of pretreatment standards should even be considered unless the municipal plant is achieving secondary treatment. EPA's entire premise is that secondary treatment accomplishes some removal of toxics. At present, secondary treatment ensures that

municipal plant effluents contain no more than 30 mg./liter of biochemical oxygen demand (BOD) and suspended solids (SS), and that the plant removes at least 85% of these pollutants from the raw wastewater.

EPA claims that secondary treatment removes approximately 60% of the metals and 70% of the toxic organics in municipal plants. In fact, the limited data on which EPA relies demonstrate that: (1) significant information is available for only about one fourth of the toxics actually detected in municipal plants; (2) the results used to derive these estimates frequently leave 50 to 100% of each pollutant unaccounted for; (3) the variation of removal efficiencies for individual pollutants at municipal plants is enormous; and (4) in any event, the studies included only well designed and operated plants that almost never have to be by-passed when heavy rains cause sewers to overflow. These estimates are no better than educated guesses.

More important, however, the Agency's proposal fails to mention EPA's plans to "re-define" secondary treatment. EPA will either remove the 30 mg./liter limit or increase it, and will eliminate the 85% requirement or decrease it. On December 17, 1981, EPA officials began circulating a draft notice of proposed rulemaking that could change the 30 mg./liter limit to 50, and change the 85% removal requirement to 75% (if it is retained at all). The draft acknowledges: that existing plants could backslide under the

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proposal; that "less stringent BOD and SS standards [would] result in less toxics removal;" and that without the 85% requirement, secondary treatment could be met through dilution rather than treatment.

With these kinds of administrative changes, this condition on the pretreatment waiver would provide no assurance of protection against toxic discharges by municipal plants. The suggested 75% removal and 50 mg./liter limits could be met by less-effective biological treatment or "chemical advanced primary" processes. With less-effective biological treatment (e.g., trickling filters, oxidation ponds) municipal plants would achieve lower removals of biodegradable organics (benzene, phenols) and any toxics that adsorb to suspended solids (cadmium, mercury). There would be major drops in the removal of volatile organics. With chemical advanced primary, plants might do better on metals, but would not remove biodegradable organics or volatiles at all.

Compliance with water quality standards. Requiring compliance with state water quality standards provides virtually no protection against toxic discharges. Pretreatment standards are supposed to address a broad variety of toxic metals, organic chemicals and other toxic compounds. But states do not have standards for most or these substances, and there is little hope that meaningful standards can or will be established any time soon. As EPA put it in a recent document,

"EPA and the states cannot make waiver decisions based on the existing designations of segments .... These designations were developed for conventional [non-toxic] pollutants."

Fewer than 20 states have any numerical standards for toxics. Those that do usually cover only a handful of heavy metals, and almost never consider chronic toxic effects or human exposures through the food chain. Only 16 states have quantitative standards for lead, cyanide and cadmium; fewer than 15 have a PCB standard; and only six have a standard for silver. Most of these standards are considerably less stringent than EPA's national criteria, and the range of values (for any given pollutant) across the states is considerable. In EPA's recent Regulatory Impact Analysis of the pretreatment program, this sorry state of affairs led the investigators to conclude that "state water quality standards are too limited for determining the national water quality impacts of industrial users."

The only hope of correcting this situation is for EPA to: (1) provide the criteria upon which states could set standards; and (2) insist that states address toxic pollutants. Neither of these actions is being taken.

EPA's national criteria are far from complete. Out of 129 priority toxic pollutants, EPA has established aquatic life criteria for only 21 . Deputy Administrator Dr. John Hernandez has belittled these criteria repeatedly as scientifically

unsound. And recently, the Agency went to court trying to escape from its legal duty to issue the remaining criteria. Instead, EPA is preparing a set of "protocols" that will assist the states in deriving less-stringent "local" criteria.

Similarly, EPA is not taking steps to see that state standards include the most important toxics. The Agency has never followed a policy of requiring states to address any particular pollutant in their standard setting. Last year EPA identified 12 toxics as deserving national attention, but its published strategy for improving water quality contains no requirement that those pollutants be considered by the states.

Compliance with general pretreatment program requirements. This condition requires that municipalities undertake at least minimal efforts to identify their industrial users and prevent the discharge of chemicals that could cause explosions, corrode pipes, or emit dangerous fumes at the plant. These requirements, while necessary, do not address the central problems of toxic chemical pass through, interference, and sludge contamination. Since local plant operators have a difficult time even finding the sources of these problems, Congress decided to address them through the standards being waived.

Attaining and maintaining designated uses. This condition also appears to be stringent, but behind it lies another significant EPA action. The Agency is preparing to change its

regulation governing how states determine the uses they will seek to protect under their standards. The new regulations, termed "use attainability" by EPA, will focus on reconsidering the states' existing designated uses to determine whether they can or should be "attained." Since most streams in the country are designated for the highest use under the Act -- "fishable-swimmable" water quality -- that means systematic and widespread downgrading to less-desirable designations such as agricultural and industrial uses. EPA will rely on quick and dirty cost-benefit analyses to justify these actions.

EPA's draft regulation eliminates long-standing EPA policies to protect water quality. It wipes out the antidegradation concept. It removes existing barriers to downgrading beneficial uses. And it eliminates special protections for outstanding national resource waters such as those found in national parks. It even suggests that good water quality need not be protected where a stream is physically too shallow for swimming and canoeing.

These changes will devastate any proposal that relies on water quality standards as the environmental "baseline." Together with the lack of any numerical state standards for toxics, it undercuts any value this supposed waiver condition might have had.

No interference with municipal plant operations. EPA's proposal requires that the waiver cannot result in interference

with municipal plant operations. As we mentioned earlier, most cities do not know which industrial sources are causing upset and interference problems at their plants. It may be that these problems are due to one or more sources in combination, or that various sources cause interference at certain times but not at others. Since it is neither easy nor inexpensive to answer such questions, there will be a strong tendency for each source to claim it is innocent, and to put the cities and EPA to their proof. That proof will be hard to come by.

Compliance with sludge guidelines. Waivers of pretreatment standards will ensure that high levels of toxics continue to enter municipal plants. Consequently, the sludges created by those plants will continue to be contaminated. Nearly 90% of municipal plants surveyed in one recent study had sludge contamination problems caused by industrial discharges, and that is not likely to change if pretreatment standards are waived.

EPA's waiver condition -- that § 405 sludge guidelines are met -- is meaningless. Despite protracted litigation by environmental groups, there are no such guidelines, and EPA has not suggested a firm target date for their issuance. At present, the Agency has a task force studying options for a policy statement on sludge disposal.

Even if guidelines are established, they will not ensure that municipal sludges are kept sufficiently free of toxics to

allow beneficial disposal techniques. The guidelines will merely set limits for whatever disposal technique is being practiced by the municipal authority. Any tough guidelines (e.g., for land disposal and composting) may well mean that pretreatment would be required before those disposal options become viable. That being the result, municipalities will be faced with strong disincentives to adopting those techniques -- i.e., denial of pretreatment waivers.

No additional requirements on other sources. This condition will place a duty on the permitting authority to determine whether granting the waiver for a given industry requires other sources to take up the slack. Since a waiver means maintaining the status quo, and since water quality standards must be met, this provision would not necessarily affect existing sources in the immediate area. It will have a significant meaning, however, in two situations. First, if water quality standards are just barely being met, then any new source in the area would be affected by the waiver. Its allocation of pollutants to the stream might already be absorbed by the waiver applicant. Second, if standards for downstream segments of the water body are not being met, the waiver could mean that downstream sources have to shoulder a larger burden than they otherwise would in complying with their requirements.

Both of these situations have to be "predicted" by the

permitting agency, and that means wasteload assessments and allocations will be necessary. These not only require enormous resources, but without the benchmarks (water quality standards) and the tools (sophisticated computer models and knowledge of persistence, synergism, etc.), such predictions are shaky at best, and usually impossible. The states' and cities' attempts to consider these factors will result in delay, expense, and protracted litigation.

No diminution of existing water quality. This condition is neither as simple nor as protective as it appears. It will produce unending scientific and policy debates, and require vast resources to implement. As EPA officials observed recently regarding BAT waivers,

> While EPA could develop guidance describing conditions where environmental waivers would have a high probability of approval, it may not be easy to develop an actual testing program for environmental waivers that would be satisfactory. A testing program determining "no adverse effects" is most easily developed for simple situations (e.g., one discharger) and even that would involve extensive lab and field work.
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> * * *
>
> Although ecological assessments are scientifically possible, individual scientists often make different assessments from the same data because few if any of the biological methods involved in field and lab assessments are standardized. Therefore, the quality of the results can strongly depend upon the expertise of those designing and conducting the assessment. This could cause inconsistencies among stream segments.

Numerous complications will arise under this waiver condition. For example, a waiver could permit discharges of toxics at current levels that will continue to build up in sediments and fish tissues. Is that a "diminution" of water quality? An adequate margin of safety should be built in to account for degradation caused by increases in non-point source runoff and new-source dischargers. Does EPA plan to do so? Waivers should be subject to change if new monitoring capability or other advances subsequently show that water quality is being degraded. Can the waivers be re-opened during the (proposed) ten-year life of the municipal permit? How far downstream will EPA apply this non-degradation condition? Is the waiver a license to avoid tougher standards if the state chooses to upgrade them later? Each of these questions and concerns suggests complications, resource burdens, and major policy choices for Congress and EPA.

Timing. Under EPA's proposal, waiver applications need not be filed until 3 years after the amendment is enacted, or 2 years after standards are issued, whichever is later. The proposal contains no deadline for issuing standards, but EPA's most recent schedule under the NRDC v. Gorsuch Consent Decree would extend deadlines out to as late as June, 1984. Consequently, waiver applications would be due in 1985 or 1986.

Pretreatment standards ordinarily must be met

within three years following promulgation. But if EPA's proposal suspends the compliance period, two of those 3 years will elapse before EPA even receives the application. And processing waivers easily can consume a year or more -- even without the inevitable litigation. Consequently, standards which should be met by 1987 under EPA's current promulgation schedule, may be met as late as 1990 -- that is, if any standards are issued to begin with.

2. Rollback of BAT Deadlines.

A. Background

Effluent limitations requiring the use of "Best Available Technology" (BAT) are the centerpiece of the Act's strategy for controlling direct, toxic industrial discharges. The 1977 amendments required EPA to issue BAT regulations for a specified list of toxic pollutants no later than July 1, 1980. Industrial dischargers are allowed until July 1, 1984 to comply with these regulations.

EPA's specific schedule for promulgating these industrial regulations is governed by the Consent Decree in NRDC v. Gorsuch, entered by a U.S. District Court in 1976 and modifed in 1979. The 1976 Decree required that these rules be issued before 1980. Under the 1979 modification, all rulemaking was to have been completed by May 1981.

EPA has issued only one regulation out of over twenty that are required, and has fallen seriously

behind its own schedule. In August 1981, EPA asked the court for extensions out to November 1983. Even the early dates in this requested schedule have been missed, and in March of this year EPA asked for further delays. The current EPA schedule -- not yet approved by the court -- would extend to June 1984.

The history of these delays is illustrated by the attached chart.

B. EPA's Proposal.

EPA proposes to extend its own deadline for promulgating BAT limitations until July 1, 1984, and to drop the Act's current requirement that these rules be reviewed and, if necessary, revised every year. This new deadline would apply to all of the industry regulations.

EPA also proposes to extend industry's compliance deadline from July 1, 1984 to July 1, 1988 for BAT regulations covering listed toxic pollutants, conventional pollutants or nonconventional pollutants. Industry would be required to meet any other limitation (e.g., those established case-by-case in a permit) within three years after it is established.

C. Discussion

i. Promulgation deadline. EPA's proposal to extend its promulgation deadline is a blatant attempt to escape from court-ordered responsibilities. The new 1984 deadline is calculated to furnish EPA the excuse to seek a modification of the Consent Decree, citing Congressional approval of this new

leeway. And even though the statute would read: "as soon as practicable, but not later than July 1, 1984," prior experience shows that the proposed date would become EPA's new "least common denominator".

If EPA can be taken at its word, this extension is not needed across the board. Even the Agency's most recent request for delay (not yet approved by the court) promises that some regulations will be issued very soon: e.g., Iron and Steel, May 1982; Inorganic Chemicals and Paint Formulators, July 1982; Petroleum Refining and Textile Mills, September 1982. Every date in EPA's current schedule is earlier than July 1, 1984, and the plaintiffs in the litigation are not yet convinced that these delays are necessary. But even under the worst case, this new deadline could mean as much as two years of delay in promulgating some of the most important regulations (e.g., Iron and Steel).

ii. Compliance Deadline.

It is generally accepted that industrial dischargers need two to three years after a limitation is established to bring themselves into compliance. EPA's proposed catch-all provision confirms this view by providing three years in all cases not governed by the suggested 1988 deadline.

Given EPA's current, staggered schedule for issuing BAT regulations, the 1988 compliance deadline makes no sense at

all. EPA has promised the court that even the last regulation will be issued by June 1984 (Organic Chemicals); this suggested compliance deadline would give that industry over four years to meet its requirements. The Iron and Steel industry, at the other end of EPA's promulgation schedule, would get over six years -- twice the usual compliance period.

EPA's proposal guarantees that toxic chemicals will be discharged by industrial sources for considerably longer periods than necessary. In the Iron and Steel industry, for example, a recent EPA report estimates that the difference between current annual discharges and discharges with BAT treatment will be over 3.8 million pounds of toxic metals and over 4.5 million pounds of toxic organics -- a total of over 8 million pounds each year. If EPA's estimates are correct, giving this industry 6 years to comply rather than 3 results in 25 million pounds of toxics needlessly discharged to the environment.

EPA projections for all of the primary industries show that nearly 38 million excess pounds of metals and 80 million excess pounds of toxic organics will be discharged during each year that BAT controls are delayed. If the average delay is just one year, our nation's waters will receive well over 100 million pounds of toxics that otherwise would not have been discharged. This is far too high a price to pay under EPA's deadline rollback.

3. Ten-Year Permits: No Further Progress for a Decade.

A. Background

The Clean Water Act authorizes EPA and state agencies to issue permits for a maximum term of five years. Congress chose this duration for a good reason -- standards and other requirements under the Act are supposed to change relatively frequently, and new permits should be issued promptly to incorporate any more stringent controls. New treatment technologies will emerge; the costs of existing technologies will go down; and better scientific knowledge about ambient pollutant effects will demonstrate the need for tighter controls. For example:

° BAT regulations are supposed to be reviewed and, if necessary, revised every year;

° Pretreatment standards should be revised "as control technology, processes, operating methods, or other alternatives change;" and

° Water quality standards must be reviewed and revised every three years.

Five-year permits make it possible to incorporate these revisions as they become appropriate.

In practice, however, five-year permits routinely last for seven or eight years. Most of the BPT permits were issued in 1973-74, and because EPA's BAT rules are overdue, they are still in effect. EPA and the states either extend these

permits, or they allow expired permits to continue under provisions of the Administrative Procedures Act and similar state laws.

B. EPA's Proposal

EPA proposes to allow all permits (municipal and industrial) to extend for 10 years rather than five.

C. Discussion

EPA's proposal would give existing sources the same period of protection Congress chose to grant new sources, whose risks are greater because new-source standards are supposed to require the most innovative control techniques. It is premised on two arguments: (1) that dischargers need the longer permit term to insulate them from additional controls; and (2) that permit writers need relief from the current workload.

EPA has not demonstrated that existing dischargers need this protection; they have merely asserted it. For example, in at least five of the primary industries, EPA plans to issue BAT rules that are no more stringent than the BPT limits facilities were supposed to have met by 1977. The ten-year term would freeze over 11,000 permits in these industries, at 1977 levels, until 1992 or beyond. And given the historical tendency for five-year permits to evolve into seven-year permits, this protection period could be much longer.

Likewise, ten-year permits will not ease permit writers' log jams; they will simply postpone the workload. The logjam

will be broken only if EPA follows its phased schedule for promulgating BAT regulations, and if industrial compliance deadlines are pegged to that schedule (e.g., three years after promulgation or issuance of BPJ permits).

What is really at stake, however, are opportunities to upgrade a discharger's requirements as the need arises over the next decade. In the 1981 construction grants amendments, for example, Congress required that all state water quality standards be reviewed and revised by the end of 1984. Those revisions should include new criteria for toxic chemicals, but if ten-year permits are issued during the next two years, those criteria will not find their way into permits until the early 1990's.

Similarly, EPA is obligated to decide, by mid-1983, whether there are additional toxics, not now on the priority list, that should be controlled in industrial discharges. Hundreds of additional substances are on the Agency's current working list. If rules are issued by the mid-1980's to govern these chemicals, they will be useless for at least 5-6 years while 10-year permits continue to protect dischargers.

EPA's proposal would put technological and environmental progress on hold for a decade. It has not been justified by any showing of need, and should not be adopted without careful consideration of the consequences.

4. A Larger Loophole for Federal Facilities

A. Background

Section 313 of the Act requires federal facilities to stand on equal footing with all other polluters in meeting abatement requirements for their discharges. They are subject to the same "Federal, State interstate and local requirements, administrative authority, and process and sanctions ... as any non-governmental entity ...." The Act permits states to impose any necessary requirements that are more stringent than federal controls, and federal facilities must meet those requirements.

The President may exempt any federal "effluent source" in the executive branch from these requirements for one year under certain limited circumstances. The President must determine that an exemption is "in the paramount interest of the United States." The most important limitations on this authority are: (1) exemptions cannot be granted from new-source standards, toxic effluent limitations, toxic effluent standards or pretreatment standards issued under §§ 306 and 307; and (2) exemptions are for only one year.

In addition, the President may issue regulations at three-year intervals exempting weaponry, equipment, aircraft, vessels, vehicles or other property that is owned or operated by the U.S. armed forces or state national guards, and that are "uniquely military in nature." These regulations also must be justified by a Presidential finding that the exemptions are "in

the paramount interest of the United States."

B. EPA's Proposal

EPA proposes to enlarge the Presidential exemption authority in four significant ways.

° Exemptions for "effluent sources" would be available with respect to all EPA regulations governing toxic discharges: new-source standards, BAT toxic effluent limitations, toxic effluent standards and pretreatment standards.

° Exemptions for "effluent sources" would last for three years rather than one.

° Regulations granting three-year exemptions would cover all facilities, not merely weaponry, equipment, aircraft, vessels, vehicles and the like.

° Regulations granting these three-year exemptions would cover non-military government facilities as long as those facilties "are essential to the maintenance of operational capabilities of the Armed Forces of the United States."

C. Discussion

Each of the four changes could have serious consequences for the reduction of toxic discharges. The first two (expansion of exemptions to cover toxics, and extension from one to three years) obviously cut directly against established Congressional policies. Congress intentionally singled out toxics for control across the board, no matter who

the polluter happens to be. And the Act restricts this presidential exemption to one year so that the primacy of states in issuing tougher standards every three years will not be thwarted. Neither of EPA's proposals to change these policies has been justified.

The third and fourth proposals (regulations exempting non-military government facilities) appear to be designed specifically to accommodate Department of Energy weapons facilities. The proposal would cover any such facilities owned or operated by DOE, and it would include toxic discharges from those facilities. Again, Congress will have to weigh carefully the wisdom of this loophole.

5. Defining Away the Problems Caused by Dams.

A. Background

The Act prohibits the discharge of pollutants by point sources except in compliance with a permit that implements effluent limitations, water quality standards and other requirements. Point sources are defined to include "any discernable, confined and discrete conveyance."

In a case brought against EPA by the National Wildlife Federation, a U.S. District Court recently ruled that man-made dams can be "point sources," can "discharge pollutants," and thus are required to have permits under the Act.

Dams often release water from deep within the reservoir that has much less dissolved oxygen than downstream waters.

These discharges can violate water quality standards and destroy aquatic life -- sometimes causing large fish kills -- and they can inhibit the downstream waters' ability to cleanse itself by breaking down organic matter discharged from sources below the dam. In addition, discharges from dams can include harmful forms of metals, seriously decreased temperatures, increased sediments, and supersaturation.

There are 50 to 60 thousand large dams in the country, and over two million dams in all. The court stressed that EPA need not issue a permit to each dam -- only those that cause pollution problems -- and that many administrative options are available to EPA, including categorical exemptions, areawide permits and general permits.

B. EPA's Proposal

Having lost in court, EPA now proposes to define away the problems caused by dams. The Agency's proposal is straight forward: change the Act so that dams are specifically defined as non-point sources rather than point sources. This amendment is similar to the fix obtained by irrigators in the 1977 Clean Water Act amendments.

C. Discussion

The water quality problems caused by dams can be defined away, but they obviously will not go away. EPA could have used the administrative flexibility cited by the Court to do something about those problems, as it has with offshore oil

rigs, feedlots and storm sewers in the past. Instead, EPA proposes to relegate these problems to the trash heap commonly referred to as non-point source "controls."

EPA's proposal will add dams to the list of non-point sources to be studied under § 208(b)(2) of the Act. Planning agencies will be asked to "identify, if appropriate, changes in the quality, movement, flow or circulation of any navigable waters including changes caused by the existence or operation of dams."

It is common knowledge that § 208 has never resulted in meaningful plans, let alone controls, for non-point sources of pollution. The program has worked so poorly that neither the administration nor Congress is eager to provide future funding. EPA's proposed authorization contains no funding for § 208.

The assignment of dams to this never-never land would guarantee that these water quality problems are forgotten by EPA and State agencies. If Congress is serious about controlling point sources through the permit process, it will reject this proposal and encourage EPA to pursue its flexible administrative options.

6. Making New Sources Into Old Sources.

A. Background

The Act prescribes stringent standards of performance for new industrial dischargers (new sources). Because these

sources are built from the ground up, they have greater flexibility than existing dischargers to use the most innovative treatment technologies and process controls to curtail their toxic discharges. In return for meeting these more stringent requirements, new sources are granted 10-year permits rather than the usual five.

Section 306 of the Act defines a new sources as "any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance ... if such standard is thereafter promulgated in accordance with this Section." (emphasis added). Section 306 also says that EPA must publish final standards within 120 days after the proposal.

Through its regulations, EPA has turned this definition upside down. Seizing on the language "if such standard is thereafter promulgated in accordance with this section," EPA says that the proposal date no longer triggers the definition whenever the Agency misses its 120 day promulgation deadline. Since EPA always misses the deadline, new sources are now those which commence construction after promulgation, not proposal.

The significance of this interpretation is not minor. EPA routinely misses its 120 day deadline, not by weeks or months, but by years. For example, EPA proposed new-source standards for offshore oil platforms in 1975, but they will not be issued

finally until 1983. When such delays occur, no source which commences construction during the interim is considered a new source under EPA's interpretation. They need only comply with BPT or water quality standards, not new-source standards.

Moreover, the Act directs EPA to comply with NEPA in issuing a permit to any new source. This additional requirement is an important tool with which to assess siting problems and other environmental impacts that are uniquely avoidable for new sources. EPA's interpretation makes this tool unavailable.

NRDC has sued EPA twice over this interpretation. Where standards do not change materially between proposal and promulgation, we see no reason why Congress' intent should not be carried out by applying these standards to new sources of pollution, as § 306 provides. Both cases are pending in the U.S. Courts of Appeals.

B. EPA's Proposal

EPA has proposed to change the definition of a new source by conforming the Act to EPA's interpretation. A new source would become any source which commences construction after promulgation of the standard.

C. Discussion

The EPA proposal is designed specifically to defeat NRDC's litigation. It could affect the quality of effluents

from thousands of new discharges. During the next year or two, EPA is required to issue new-source standards, under the NRDC v. Gorsuch Consent Decree, for all of the primary industries. These standards will specifically address toxic pollutant discharges from many categories of sources -- some for the first time. Every new facility for which construction commences between proposal and promulgation will escape those regulations. Given EPA's long delays thus far, a large number of plants could slip through EPA's loophole.

This proposal makes a significant step toward mortgaging the future. It stifles Congress' determination to seize the only real opportunity for wise planning decisions and truly stringent requirements based on the most innovative treatment processes available.

7. Relaxing Thermal Discharge Requirements

A. Background

The Act defines the term "pollutant" to include heat, so like any other pollutant the thermal component of a discharge is subject to BPT, BAT, water quality standards and new-source standards. The Act has a special section (316), however, that permits a modification (i.e., a variance) of these requirements (except for water quality standards).

The variance depends on a showing by the discharger that its requirements are more stringent than "necessary." If EPA or a state grants the variance, they must demonstrate that the

modified requirements are stringent enough.

The key, then, is how one decides what is "necesssary" and what is stringent enough. The Act establishes an important benchmark for these decisions; it requires that thermal discharges assure "the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water." (emphasis added). EPA calls this benchmark a BIP.

This phrase is found, with some variation, throughout the Act. Its roots are in the "national goal" set forth in § 101(a)(2). It is a prominent part of the formula for deriving "water quality related effluent limitations" under § 302 for use when BAT proves inadequate to protect water quality. And it comprises an important portion of the "floor" below which EPA cannot go in granting variances from BAT (§ 301(g)) or from secondary treatment for coastal municipal plants (§ 301(h)).

This phrase, particularly as part of the variances in which it is found, maintains an environmental minimum for decisions to depart from technology-based controls. It is closely linked to what is called "the objective of this Act": "to restore and maintain the chemical, physical and biological integrity of the Nation's waters." In the House Report on the 1972 legislation, Congress explained this concept as follows:

> Although man is a part of nature and a product of evolution, 'natural' is generally defined as that condition in existence before the activities of man invoked perturbations which

> prevented the system from returning to its original state of equilibrium.
>
> This definition is in no way intended to exclude man as a species from the natural order of things, but in this technological age, and in numerous cases that occurred before industrialization, man has exceeded nature's ... ability to respond to change. Any change induced by man which overtaxes the ability of nature to restore conditions to 'natural' or 'original' is an unacceptable perturbation.

(emphasis added). The "balanced indigenous population" (or BIP) standard is Congress' embodiment of this concept as an environmental baseline.

B. EPA's Proposal

EPA proposes to substitute for this standard the requirement that thermal discharges merely assure attainment or maintenance of state water quality standards or, where applicable, satisfy ocean discharge criteria. Modifications granted under § 316 would turn on this new, relaxed standard, but would not be permitted to diminish "existing water quality."

C. Discussion

EPA's proposal is an attempt to satisfy the utilities, led by the Edison Electric Institute, in their years-long battle to gain relief from thermal discharge requirements, and particularly from the need to use cooling towers. The new provision would abandon one of the most fundamental environmental principles in the Act. In place of that principle, EPA would substitute a mechanism -- state standards -- that is subject to all of the manipulation and downgrading

described earlier (see discussion of pretreatment waivers).

After EPA assists the states in downgrading their standards, some lakes and rivers will have no real protection at all. Thermal waivers will have no meaningful, environmental baseline. A stretch of river designated for agricultural use or industrial operations, for example, would not have standards to protect fish and shellfish propagation. This new EPA standard will permit the destruction of aquatic life wherever such downgrading takes place.

The EPA proposal includes a second floor: no diminution of water quality. While appearing to be protective, this requirement in fact will act as a brake against improving water quality. Moreover, it will perpetuate the same, difficult and resource intensive controversies over water quality analysis that we described earlier (see discussion of pretreatment waivers). It was to avoid these controversies, and the delays they cause, that Congress adopted technology-based controls in the first place -- the very controls that would be waived under this provision.

These waivers are from BAT and new-source standards. Since neither has been implemented for power plants, the effect of a waiver is to preserve the status quo. Naturally, water quality will remain the same (the water will not get warmer) under a waiver of these controls. The point is, however, that these controls are supposed to improve water quality so it can

support balanced indigenous populations of aquatic life.

EPA's "no diminution" standard proposes that we accept water quality the way we find it today, and relinquisn the principle of improving that quality to the point where aquatic conditions can obtain their natural equilibrium. It is a sobering proposal, and one that requires a good deal of Congressional soul searching.

8. Lower Authorization of Funding.

A. Background

Funding for Clean Water Act programs must be reauthorized, and to its credit EPA has proposed a five-year term of authorization. The duration and funding levels of the reauthorization are critical to the success of EPA's programs, for without the necessary stability and resources this Agency cannot carry out Congress' intentions.

B. EPA's Proposal

EPA proposes to set the authorized funding level for FY 1983 at the amount requested in the President's FY 83 budget (a total of $146.3 million). For Fiscal Years 1984 through 1987, EPA proposes "such sums as may be necessary."

C. Discussion

The President's FY 1983 budget should not be Congress' reference for the authorization level. It is $24.7 million (17%) below the Reagan Administration's FY 82 budget estimate, which itself represents a drastic cut from funding for prior years. And it calls for the loss of 18 full-time personnel

(out of 170 in FY 82) to implement water programs. EPA and the states cannot be expected to carry out their responsibilities, let alone new responsibilities added by these amendments, with reduced resources.

9. Non-controversial Proposals

EPA has proposed to amend the Act in several minor ways that would provide technical, non-controversial changes. The following discussion outlines the highlights of these proposals.

A. Partial delegation. The EPA proposal would allow states to seek partial delegation of NPDES permit programs. Partial programs could be approved by major components such as pretreatment, federal facilities, municipal vs. industrial dischargers, or by industrial category. Approval of partial programs would depend on a state's commitment to assume full delegation within 5 years. The proposal would not allow currently approved states to relinquish portions of their programs, or permit EPA to partially withdraw its approval.

B. Extension of Time to Apply for Stretchouts of Municipal Compliance Deadline. Last year, Congress provided that cities facing problems meeting secondary treatment requirements could apply for a stretchout (until 1988) whenever their difficulties were caused by reduced federal funding that made it impossible to comply by 1983. Congress forgot to

extend the deadline in the Act (1978) for making these applications. EPA proposes to set a deadline of 12 months after enactment of the 1982 legislation.

C. Waiver Fees. EPA proposes to authorize the Administrator and the states to collect fees from any applicants for waivers and exemptions under §§ 301(c), (g), (h), 307(b) and 316(a). The amounts would be whatever "he/she deems appropriate," and (in the case of EPA) would be used solely for processing such applications.

This is a good idea, particularly considering EPA's dwindling budget. It could be improved, however, in two important respects. First, the restricted use of funds should apply to state programs as well as EPA. Second, the Act should provide that the amount of each fee must actually cover the cost of processing any waiver or exemption. If applicants have to pay for the delays and burdens they impose, there will be less incentive for them to press ill-founded applications or simply drag their feet.

D. Administrative Penalties. EPA proposes to amend the Act by adding authority to assess penalties in administrative orders. The maximum penalty would be $5,000 per day for each violation of: most of the Act's requirements; permit conditions under § 402; or § 404 permit conditions imposed by a state. The EPA proposal provides for notice, opportunity for a local hearing, and judicial

review. It also sets forth factors to be considered in setting the size of the penalty, including ability to pay and the effect of a penalty on ability to continue in business. The Attorney General could recover any unpaid penalties by bringing an action in U.S. District Court.

This is an acceptable proposal as long as its ramifications are fully understood. It should not, for example, affect the rights of states or citizens to bring enforcement actions against polluters. It should not be turned into a routine wrist-slapping exercise for violations that should result in civil enforcement suits by EPA. And it should not be carried out in such a way that EPA enforcement resources are frittered away on trivial violations through endless administrative hearings and appeals. These concerns should be considered carefully by Congress.

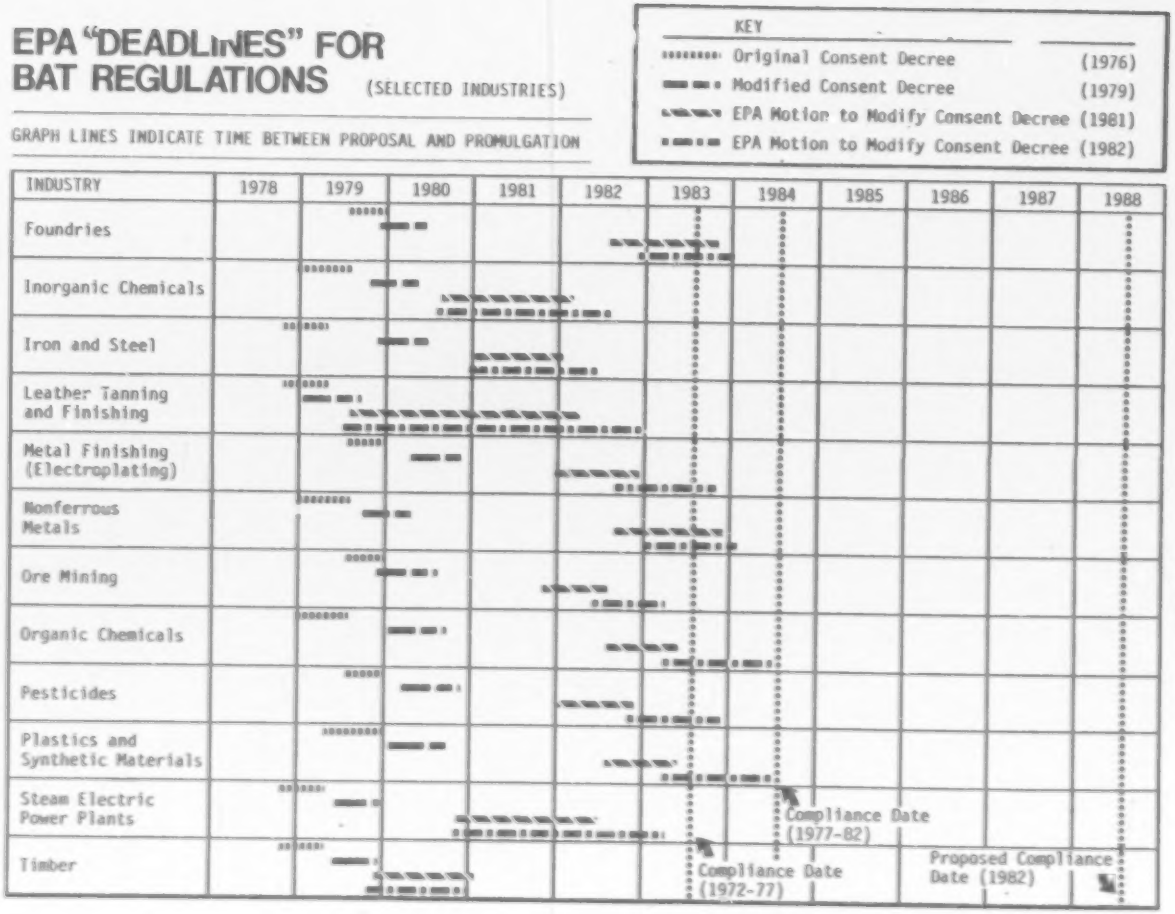
E. Felony Sanctions. EPA proposes to add new felony sanctions to the law. Presently, the Act authorizes felony sanctions only for repeat offenders. This is a major deficiency in the statute. For example, dumping a toxic substance on the ground could bring felony sanctions under RCRA. But if the same substance is poured into a sewer together with domestic wastes (as happened in Louisville), and causes the same consequences, the Clean Water Act affords only misdemeanor penalties.

EPA proposes to add felony sanctions for negligent and

knowing violations of the Act or permit conditions, incuding all of the Act's direct discharge requirements, sludge guidelines, pretreatment restrictions and § 404 permits. The proposal specifically covers a person who "discharges into a sewer system or into a publicliy owned treatment works any pollutant or hazardous substance which may cause the injury of person." The penalties are $2500 to $25,000 and/or one year in prison for negligence, and $5,000 to $50,000 and/or up to two years of imprisonment for knowing violations. The proposal also creates felony sanctions for falsification of reports and tampering with monitoring devices. Repeat offenders could be subject to double these penalties.

EPA "DEADLINES" FOR BAT REGULATIONS (SELECTED INDUSTRIES)

GRAPH LINES INDICATE TIME BETWEEN PROPOSAL AND PROMULGATION



NRDC
Clean Water

Analysis of EPA Proposals for Amending The Clean Water Act

Supplement

July 21 1982

J Taylor Banks
Fran Dubrowski
Michael Bacon

Natural Resources Defense Council • 1725 Eye Street NW Suite 600 • Washington DC 20006 • 202/223-8210

On April 8, 1982, NRDC released its Analysis of EPA's preliminary proposal to amend the Clean Water Act. The EPA proposal was a collection of special-interest loopholes, and that is what we called it.

This Supplement addresses the pretreatment portion of EPA's final proposal that Administrator Gorsuch sent to Congress on May 25, 1982. There are major changes in this part of EPA's agenda, and they would tend to undermine the Act considerably more than the preliminary version we analyzed in April.

Moreover, as bad as it was, the preliminary version was at least straightforward and clear; many aspects of the final proposal are hidden in the intricacies of EPA's legislative drafting. In short, the final proposal is not as bad as we feared it would be. It is significantly worse -- both on its face and between the lines.

In the discussion below, we merely highlight the issues raised by changes from EPA's preliminary Pretreatment proposal. Our April 8 Analysis describes the remaining concerns with EPA's reauthorization agenda.

The Pretreatment Retreat.

EPA's preliminary proposal to amend the Act's pretreatment program had two major components. It would have: (1) eliminated EPA's duty to issue categorical pretreatment standards for toxic industrial wastes discharged to municipal sewage plants; and (2) furnished opportunities for industries to obtain waivers from any standards EPA may choose to issue.

We criticized EPA's proposal as an unjustified retreat from the Act's principles. In particular, we pointed out that:

- EPA had not justified its plan to abandon categorical standards for all but a few industries;
- Most cities would be unable to ensure adequate pretreatment without federal standards;
- EPA's proposed waiver would place enormous financial and administrative burdens on state and local governments; and
- EPA's waiver conditions not only provided little assurance of environmental protection, but because they depend on data and analytical tools that do not exist, would consume many fruitless years and additional administrative resources.

The pretreatment retreat has turned into a total surrender. EPA's final version is far more complex and damaging than the preliminary proposal. In addition to the two components described earlier, EPA now proposes an exemption for municipal plants. Thus, any of the three partners in pretreatment could opt out: EPA by not issuing standards; cities by gaining exemptions from the program; and industrial sources by obtaining waivers. The new proposal is significantly different in its mechanics and its benchmarks, and it contains several subtle but damaging changes, as described below.

A. The General Program Regulations.

As our Analysis pointed out (p. 3), EPA has delayed the general pretreatment program regulations almost since the day this Administration took over. The Agency is conducting a Regulatory Impact Analysis under Executive Order 12291, and intends to change the regulations to fit its own view of the program.

EPA now proposes an amendment to § 307(b)(1) that would facilitate these changes. Both the preliminary and final proposals would "continue in force" the general program regulations -- inappropriately implying Congressional approval of EPA's regulations on the date amendments are passed. But the final proposal has been altered in two significant respects from the preliminary version:

1. Regulatory Revisions. The April version allowed EPA to revise its general program regulations only "as necessary." The final proposal permits the Administrator to make any revisions she deems "appropriate." This is a very broad standard -- one that could be construed to allow EPA nearly unfettered discretion in re-writing the pretreatment program.

The Act should not turn any EPA Administrator loose to do what he/she deems "appropriate" without further directions or limits on his/her discretion. Constraints are particularly in order when the leadership at EPA has acknowledged its intention to reverse Congressional policy through changes in regulations -- as Ms. Gorsuch and Dr. Hernandez have done continuously on pretreatment issues.

2. Delayed implementation. Where the April version allowed 18 months after enactment to comply with these general program regulations, the final version allows 2 years after promulgation to comply with any such revisions to the regulations. This is an unwarranted, open-ended avenue for delay. EPA could find it "appropriate," for example, to modify a key component of the rules*/ some time in 1984, and give municipal authorities until 1986 to comply with the modification. Meanwhile, pretreatment easily could be put on hold.

B. Categorical Standards.

The final version retains EPA's proposal to eliminate its mandatory duty to issue categorical pretreatment standards. Our Analysis discusses in detail the reasons why we believe this is an unwise and unwarranted amendment (see pp. 5-10). Now, two additional and serious deficiencies have surfaced in the final proposal.

1. Deletion of Congressional policy control. EPA would delete from the Act any and all Congressional direction, policies or requirements on what pretreatment standards must accomplish. The Agency not only would have the discretion not

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*/ The general program regulations contain important provisions that must be in place before categorical pretreatment standards can be implemented. The credit provision and combined wastestream formula for example, were held up by EPA for over a year. Consequently, existing categorical standards (for electroplaters) were effectively suspended by that action.

to issue any standards, but if it chose to issue any, it could write the standards as loose as it wished.

This is one of EPA's more subtle fixes. The final proposal deletes language from the preliminary version that required categorical standards to be "analogous to ... best available technology [BAT] ... as specified under sections 301(b)(2)(A) and 304(b)(2) ...."*/ Instead, the proposal now merely directs EPA to "consider the factors specified under Section 304(b)(2)." This is quite significant because it avoids the key statutory language and legislative history that define BAT -- i.e., the "BAT formula." For example, Section 301(b)(2) directs EPA to require the "best technologies, while § 304 merely lists factors to consider. Similarly, § 301(b)(2) requires "reasonable further progress" beyond existing controls, and mandates the elimination of pollutant discharges if EPA finds it to be technologically and economically feasible. The factors in § 304 contain none of this Congressional direction and policy.

In short, EPA's new proposal does not even contain a decision rule for pretreatment standards. It eliminates the statutory formula, substitutes a mere duty to examine several factors and, of course, allows the Administrator to give them any weight he/she decides is appropriate. Nowhere does EPA

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*/ In addition to the BAT analogy prescribed in legislative history to the 1977 Clean Water Act amendments, the statute now says that pretreatment standards shall "prevent the discharge of any pollutant" that proves to be incompatible with municipal treatment works. EPA's proposal eliminates this language.

explain why it chose to place these changes in its proposal to Congress.

2. New authority to rescind regulations. EPA's proposal mentions, for the first time in this statute's history, authority for the Administrator to rescind regulations. The final version of EPA's proposal says that any categorical standards in effect prior to the amendments shall continue in full force and effect "unless modified or rescinded by the Administrator."

More important, the proposal then expands the Act's grounds for revising such standards*/ to include a determination by the Administrator "that they are no longer necessary or reasonable."

This is a blank check for EPA to eliminate any or all standards established in the coming months with almost no opportunity for meaningful judicial review of those decisions. If the Act is not amended until the end of 1982 or in 1983, EPA will have issued about a dozen such standards. By late 1983, nearly all of the standards for primary industries will have been promulgated. This proposal paves the way for rescinding all of those rules -- the entire federal standard setting program -- as "no longer reasonable."

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*/ The Act now says that EPA may revise (not rescind) pretreatment standards "as control technology, processes, operating methods, or other alternative[s] change." (§ 307(b)(2)).

Congress has never blindly waived its authority to set pretreatment policy, and should not begin with this proposal.

4. Exemptions for Municipal and Indirect Sources.

The April version's waiver for industrial sources has been replaced by two exemption provisions in the final proposal. Now EPA's bill provides that either a municipal plant or an indirect discharger can be exempted from the Act simply by certifying that they meet certain conditions. The proposal is full of problems and ambiguities.

I. Municipal exemptions.

The exemption for municipalities is EPA's biggest surprise. About 85 large cities, represented by the Association of Metropolitan Sewerage Authorites (AMSA) have lobbied for an opportunity to be relieved from enforcing federal categorical standards where they can show they have satisfactory local pretreatment programs. But this EPA proposal goes one step further; it would allow cities to ignore the general program requirements of the Act (industrial waste surveys and the like). Until now, no one has urged Congress (or EPA) to furnish this authority.

A city need not make any demonstration or submit any evidence to obtain its exemption. The EPA proposal requires only a certification by the municipal authority that it meets eight "conditions." These conditions are noteworthy for their lack of meaningful water quality protection:

a. The city must have a program "adequate to meet the objectives of section 402(b)(8) of the Act." Section 402(b)(8) does not have objectives; it has requirements (identification and control of indirect sources). It is from those very requirements that a municipal plant would be exempted.

b. The plant must be in compliance with secondary treatment requirements (or have a § 301(h) ocean outfall waiver) and with § 403 ocean discharge criteria. These already are required by the Act, of course, so EPA's condition merely rules out non-compliers. Moreover, given EPA's plans to re-define secondary treatment (see Analysis, pp. 13-15) in a significantly less-stringent fashion, this condition is not protective against discharges of toxic pollutants.

c. The third condition -- EPA's benchmark for adequate treatment of toxics -- is nothing short of incredible:

> effluent limitations exist for the treatment works (or there is a commitment to establish such limitations) for any pollutant which passes through the treatment works in quantities sufficient to interefere with the attainment or maintenance of designated uses of the body of water into which such works discharge and that the works are in compliance or subject to a schedule for achieving compliance with such limitations.

(emphasis added). At least the following problems are apparent:

° It is not clear who would establish these new limitations or review them for sufficiency, and there are no incentives, requirements or deadlines for doing

so. It is clear, however, that at present very few municipal permits have any limits on the toxic chemicals that will be covered by pretreatment standards.

° These new limitations could either have enormous impacts on the Construction Grants Program or, because of cutbacks in that program, cause long delays in toxics control. The Act provides authority for states to impose "more stringent limitations" (§301(b)(1)(C)), but also allows cities to obtain extensions of deadlines to meet them where federal financial assistance is not available (§301(i)(1)). There is no guarantee or requirement in EPA's proposal that cities must meet these new limitations through pretreatment rather than Advance Waste Treatment facilities. If a city chooses to pursue the latter, it can obtain a schedule delay out to at least 1988.

° The limitations need not accomplish anything, let alone assure attainment or maintenance of the designated use. As EPA has drafted its proposal, limitations merely have to exist for certain pollutants. The proposal says nothing about their level of stringency.*/

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*/ Even if EPA's proposal required that the limitations protect designated uses, we would remain concerned: (1) because there are very few toxics criteria to assure such protection, and (2) because of EPA's plans to encourage widespread downgrading of such uses. See Analysis, at 15-18.

- The proposal places no constraints on the length of any schedule for achieving compliance with these new effluent limitations.
- The proposal does not require any limitation on toxics discharges except for pollutants that are demonstrated to pass through a municipal plant in quantities sufficient to interfere with designated uses. Since there are virtually no acceptable federal, state or local criteria for determining whether interference is occurring, such showings will be difficult, if not impossible.

If one set out to draft a meaningless condition, it is hard to imagine how to improve upon this language.

d. The fourth condition is that the exemption must not cause any pollutant to interfere with municipal plant operations on impair sludge use or disposal in accordance with § 405 of the Act. As our Analysis pointed out (pp. 18-20), the widespread ignorance of interference problems by municipal authorities, and the lack of any comprehensive sludge guidelines under § 405, render this condition useless.

e. The municipal plant must have "adequate legal, financial, technical, analytical, administrative, and enforcement authority" to operate its program successfully. EPA's proposal requires merely a certification to this effect, not a submission or any evidence of adequacy. There will be no review and no real opportunity to determine whether this

condition has any effect on local pretreatment programs.

f. The local program must have "provisions as are necessary to carry out subsection (b)(1) [general program regulations]." These would include specific prohibitions on pollutants that cause corrosion, explosions, etc. that cities are now required to implement.

g. The plant must have a monitoring program (already required by § 402).

h. The city must submit a new certification annually.

If a municipal authority certifies to EPA that it meets these conditions, it need not worry about the Clean Water Act. That does not help the indirect industrial souces, however, since they still must comply with any categorical standards issued under Section 307(b). Accordingly, EPA's proposal then provides an exemption for these industrial users as well.

II. Exemptions for indirect sources. EPA's final proposal provides an exemption from categorical pretreatment standards for all sources (existing or new) in a municipal system based on nearly the same certification used to exempt the city itself from the Act's other requirements. The conditions differ only as follows:

- effluent limitations must exist for pollutants that pass through the POTW, and the POTW must be in compliance with those limitations. Commitments to establish limitations and schedules for compliance are not good enough.

° the municipal plant must be in compliance with the local program requirements of § 402(b)(8) or have an exemption.

This industrial exemption provision suffers from the same problems described above for the municipal exemption. In addition, EPA has dropped three significant conditions that its preliminary proposal would have imposed on pretreatment waivers for industrial sources.

a. The preliminary version would have denied a variance unless the designated uses under § 303 were being attained by the municipal discharge. In the final version, those uses can be violated so long as some sort of undefined "effluent limitation" is met.

b. The final proposal drops the condition that exemptions not place additional treatment requirements on other sources. This (together with the omission described just above) would make it possible that exemptions could result in heavier burdens on other sources.

c. The final version eliminates an earlier requirement that an exemption "not result in a diminution of existing water quality." By withdrawing this condition, EPA has proposed to allow degradation of currently attained water quality.

EPA has not explained its reasons for dropping these obviously protective conditions.

II

97TH CONGRESS
2D SESSION

S. 2652

To revise and extend certain provisions of the Federal Water Pollution Control Act, as amended, for five years, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JUNE 18 (legislative day, JUNE 8), 1982

Mr. CHAFEE (for himself, Mr. STAFFORD, and Mr. RANDOLPH) (by request) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To revise and extend certain provisions of the Federal Water Pollution Control Act, as amended, for five years, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq.) is amended as follows:

AUTHORIZATION

SECTION 1. (a) Section 104(u)(1) is amended by deleting the word "and" following "1981," and by inserting "not to exceed $13,000,000 for the fiscal year ending September 30, 1983, and such sums as may be necessary for the fiscal years

ending September 30, 1984, September 30, 1985, September 30, 1986, and September 30, 1987" immediately following "1982,".

(b) Section 106(a) is amended by adding the following new subsection immediately following "1982;":

"(3) $40,900,000 for the fiscal year 1983, and such sums as may be necessary for the fiscal years 1984, 1985, 1986, and 1987.".

(c) Section 517 is amended by striking "and" immediately following "1981," and by inserting "$92,400,000 for the fiscal year 1983 and such sums as may be necessary for the fiscal years 1984, 1985, 1986, and 1987" immediately before the period at the end thereof.

(d) Section 517 is further amended by inserting "304(k)" in place of "304".

BAT/BCT COMPLIANCE DEADLINE EXTENSION

SEC. 2. (a) Section 301(b)(2)(C) is amended to read as follows: "With respect to all toxic pollutants referred to in table 1 of Committee Print Numbered 95–30 of the Committee on Public Works and Transportation of the House of Representatives, compliance with those effluent limitations established in regulations issued under sections 301(b)(2) and 304(b)(2) of this Act no later than July 1, 1988, and for all other limitations established to carry out the provisions of

this subparagraph compliance no later than three years after the date such limitations are established;".

(b) Section 301(b)(2)(E) is amended to read as follows: "With respect to pollutants identified pursuant to section 304(a)(4) of this Act for categories and classes of point sources, other than publicly owned treatment works, compliance with those effluent limitations established in regulations issued under sections 301(b)(2)(E) and 304(b)(4) of this Act no later than July 1, 1988, and for all other limitations established to carry out the provisions of this subparagraph compliance not later than three years after the date such limitations are established;".

(c) Section 301(b)(2)(F) is amended to read as follows: "For all pollutants (other than those subject to subparagraphs (C), (D), or (E) of this paragraph) compliance with those effluent limitations established in regulations issued under sections 301(b)(2) and 304(b)(2) of this Act no later than July 1, 1988, and for all other limitations established to carry out the provisions of this subparagraph compliance no later than three years after the date such limitations are established.".

(d)(1) Section 301(k) is amended by deleting the words "July 1, 1987," and inserting in lieu thereof the words "July 1, 1991,".

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(2) Section 301(k) is further amended by deleting the letter "(A)" from "(b)(2)(A)" wherever it appears.

MUNICIPAL DEADLINE

SEC. 3. Section 301(i)(1) is amended by deleting the words "within one hundred and eighty days after the date of enactment of this subsection" and inserting in lieu thereof the following: "within twelve months after enactment of the Clean Water Act Amendments of 1982.".

ENVIRONMENTAL MODIFICATION FEES

SEC. 4. Section 301 is amended by adding a new subsection (m) as follows:

"(m) The Administrator may prescribe such processing fees for applications for modifications and exemptions submitted to the Administrator pursuant to sections 301(c), (g), and (h), 307(b), and 316(a) of this Act as the Administrator deems appropriate. All amounts collected by the Administrator under this subsection shall be used solely for application processing purposes: *Provided*, That these amounts shall be credited to the appropriation that incurs the costs and shall be available only in such amounts as are included in appropriations Acts.".

NEW SOURCE PERFORMANCE STANDARDS

SEC. 5. Section 306(a)(2) is amended by adding a sentence at the end thereof to read as follows: "For the purposes of any regulation proposed after the date of enactment of the

Clean Water Act Amendments of 1982, the term 'new source' shall mean any source, the construction of which is commenced after the publication of final regulations prescribing a standard of performance under this section which is applicable to such source.".

BAT/BCT PROMULGATION DEADLINE EXTENSION

SEC. 6. (a) Section 304(b) is amended by deleting the first full sentence and inserting in lieu thereof the following: "For the purpose of adopting or revising effluent limitations under this Act, the Administrator shall, after consultation with appropriate Federal and State agencies and other interested persons, publish regulations providing guidelines for effluent limitations as soon as practicable but in no case later than July 1, 1984.".

(b) Section 306(b)(1)(B) is amended by deleting the first full sentence and inserting in lieu thereof the following: "As soon as practicable after a category of sources is included in a list under paragraph (A) of this paragraph, but in no case later than July 1, 1984, the Administrator shall propose and publish regulations establishing Federal standards of performance for new sources within such category.".

(c) Section 307(a)(2) is amended by deleting the words "after the date of enactment of the Clean Water Act of 1977, but not later than July 1, 1980." and inserting in lieu thereof the words ", but not later than July 1, 1984.".

PRETREATMENT

SEC. 7. (a) Section 307(b) is amended to read as follows:

"(b)(1) The Administrator shall continue in force and may revise as appropriate regulations established prior to the enactment of the Clean Water Act Amendments of 1982 that are generally applicable to all categories of sources for the introduction of pollutants into treatment works (as defined in section 212 of this Act) which are publicly owned, for those pollutants which are determined not to be susceptible to treatment by such treatment works, which may interfere with the operation of such treatment works, pass through such works, impair sludge use or disposal by such works in accordance with section 405 of this Act, or otherwise be incompatible with such works. Pretreatment regulations under this paragraph promulgated or significantly revised on or after the date of enactment of the Clean Water Act Amendments of 1982 shall specify a time for compliance not to exceed two years from the date of promulgation.

"(2) The Administrator may promulgate standards for specific categories and classes of sources which introduce into treatment works (as defined in section 212 of this Act) which are publicly owned, pollutants which are determined not to be susceptible to treatment by such treatment works, which may interfere with the operation of such works, pass through such works, impair sludge use or disposal by such works in

accordance with section 405 of this Act, or otherwise be incompatible with such works. In promulgating standards under this paragraph, the Administrator shall consider the factors specified under section 304(b)(2) of this Act. Pretreatment standards promulgated under this paragraph shall specify a time for compliance not to exceed three years from the date of promulgation. All standards and regulations for specific categories and classes of sources established pursuant to sections 307 (b) and (c) of the Federal Water Pollution Control Act, as amended, which were in effect immediately prior to the date of enactment of the Clean Water Act Amendments of 1982, shall continue in full force and effect after the date of enactment of the Clean Water Act Amendments of 1982 unless modified or rescinded by the Administrator in accordance with paragraph (4) of this subsection or because he determines that they are no longer necessary or reasonable.

"(3) If in the case of any pollutant subject to a standard under paragraph (2) of this subsection or section 307(c) of this Act which is introduced by a source into a publicly owned treatment works, the treatment by such works removes all or any part of such pollutant and the discharge from such works does not violate that effluent limitation or standard which would be applicable to such pollutant if it were discharged by such source other than through a publicly

owned treatment works, and does not impair sludge use or disposal by such works in accordance with section 405 of this Act, then the pretreatment requirements for the sources actually introducing such pollutant into such publicly owned treatment works may be revised by the owner or operator of such works to reflect the removal of such pollutant.

"(4) The Administrator may revise pretreatment standards and regulations from time to time, as control technology, processes, operating methods, or other alternatives change.

"(5)(A) The Administrator, with the concurrence of the State, (or, if appropriate, the State) may after opportunity for a public hearing issue a permit under section 402 of this Act which exempts a treatment works (as defined in section 212 of this Act) which is publicly owned from the requirements of section 402(b)(8) of this Act upon a certification by the owner or operator of such works satisfactory to the Administrator (or, if appropriate, the State) that—

"(i) the owner/operator has established a program adequate to meet the objectives of section 402(b)(8) of this Act;

"(ii) the treatment works is currently and will continue to be in compliance with effluent limitations based upon secondary treatment as defined pursuant to section 304(d)(1) of this Act (as may be modified by

section 301(h)) and with the requirements of section 403 of this Act;

"(iii) effluent limitations exist for the treatment works (or there is a commitment to establish such limitations) for any pollutant which passes through the treatment works in quantities sufficient to interfere with the attainment or maintenance of designated uses of the body of water into which such works discharge and that the works are in compliance or subject to a schedule for achieving compliance with such limitations;

"(iv) such exemption will not result in any pollutant interfering with the operation of such works or impairing sludge use or disposal by such works in accordance with section 405 of this Act;

"(v) the owner/operator has adequate legal, financial, technical, analytical, administrative, and enforcement authority to ensure the successful operation of such program;

"(vi) such program contains such provisions as are necessary to carry out subsection (b)(1) including but not limited to specific prohibitions against the introduction into the treatment works of heat sufficient to inhibit biological activity in the works, and other pollutants that create a fire or explosion hazard in the

works, cause corrosive structural damage, exist in solid or viscous amounts that cause obstructions in sewers or interfere with the operation of the works, or exist at a flow rate and concentration known to cause or that may cause interference with the works;

"(vii) a monitoring program will be established in accordance with section 402 of this Act to ensure continued compliance with the requirements of this paragraph; and

"(viii) an annual report will be submitted to the Administrator (or, if appropriate, the State) to certify continued compliance with the requirements of this paragraph.

"(B) The Administrator with the concurrence of the State, (or, if appropriate, the State) may, after opportunity for public hearing exempt all sources subject to standards established under sections 307 (b)(2) and (c) of this Act introducing pollutants into a particular treatment works from such standards upon a certification by the owner or operator of such treatment works satisfactory to the Administrator (or, if appropriate, the State) that—

"(i) the treatment works is currently and will continue to be in compliance with effluent limitations based upon secondary treatment as defined pursuant to section 304(d)(1) of this Act (as may be modified under

section 301(h)) and with the requirements of section 403 of this Act;

"(ii) effluent limitations exist for the treatment works for any pollutant which passes through the treatment works in quantities sufficient to interfere with the attainment or maintenance of designated uses of the body of water into which such works discharge and that the works is in compliance with such limitations;

"(iii) the treatment works is in compliance with the requirements of section 402(b)(8) of this Act or (5)(A) of this subsection, whichever is applicable;

"(iv) such exemption will not result in any pollutant interfering with the operation of such works or impairing sludge use or disposal by such works in accordance with section 405 of this Act;

"(v) the owner or operator has adequate legal, financial, technical, analytical, administrative, and enforcement authority exists to ensure compliance with the provisions of this paragraph;

"(vi) a monitoring program will be established in accordance with section 402 of this Act to ensure continued compliance with the requirements of this paragraph; and

"(vii) an annual report will be submitted to the Administrator (or, if appropriate, the State) to certify continued compliance with requirements of this paragraph.

"(C) No exemption under paragraph (5)(B) shall apply to any new source unless the treatment works into which such new source is introducing pollutants certifies that the exemption of such new source will not cause the violation of any of the requirements of paragraph (5)(B).

"(6)(A) Any request for an exemption under paragraph (5)(A) of this subsection shall be filed not later than two hundred and seventy days from the date of promulgation of regulations established under subparagraph (F).

"(B) Any application for an exemption under paragraph (5)(B) of this subsection shall be filed not later than three years from the date of enactment of the Clean Water Act Amendments of 1982 for standards in effect prior to that date, or two years after the date of promulgation of any standard under paragraph (2) of this subsection.

"(C) The Administrator (or, if appropriate, the State) may consider an application for an exemption submitted after the dates specified under paragraphs (5) (A) and (B) of this subsection of this subsection upon a satisfactory showing that the delay in filing the application was due to factors beyond the control of the applicant.

"(D) Any exemptions granted under paragraph (5) of this subsection shall be fixed terms not exceeding ten years.

"(E) Each State shall transmit to the Administrator a copy of each exemption under paragraph (5) of this subsection proposed to be issued by such State together with a copy of all supporting documentation. No exemption shall be issued if the Administrtrator objects in writing within ninety days of the date of transmittal to the granting of such exemption as being outside the requirements of this subsection.

"(F) Upon a finding that any of the applicable requirements of this subsection are not being met by the treatment works to which an exemption was granted, and after notice and consultation with State and local authorities (or, if appropriate, the Administrator), the Administrator (or, if appropriate, the State) may modify or rescind such exemption, or may establish such effluent limitations for the treatment works as may be necessary to achieve the purposes of this subsection.

"(G) To facilitate the processing of environmental exemptions under paragraph (5) of this subsection, the Administrator is authorized to promulgate regulations establishing an exemption processing system which, in the case of paragraph (5)(B), shall require, at a minimum, the denial of any request for an exemption unless the owner or operator of the treatment works certifies that the works are currently and will

continue to be in compliance with the requirements of section 307(b)(5)(B)(i) of this Act.".

(b) Section 307(c) is amended as follows: "Simultaneously with the promulgation of pretreatment standards for existing categories and classes of sources under paragraph (2) of this subsection, the Administrator shall promulgate pretreatment standards for equivalent categories and classes of sources introducing pollutants into publicly owned treatment works, which sources would be new sources under section 306 if they were to discharge pollutants. Pretreatment standards established for new sources shall be analogous to standards specified under section 306 of this Act. Such pretreatment standards shall be established for the introduction into publicly owned treatment works of pollutants which are determined not to be susceptible to treatment by such treatment works, which may interfere with the operation of such treatment works, pass through such works, impair sludge use or disposal by such works in accordance with section 405 of this Act, or otherwise be incompatible with such works.".

"(c) Section 307(d) is amended by inserting a comma in place of the period and adding the following words to the sentence at the end thereof: "unless the source has been exempted from such pretreatment standard pursuant to this section.".

ADMINISTRATIVE CIVIL PENALTY AUTHORITY

SEC. 8. Section 309 is amended by adding a new subsection (g) as follows:

"(g)(1) In addition to any other relief provided, whenever on the basis of any information available to him the Administrator finds that any person is in violation of section 301, 302, 306, 307, 308, 318, or 405 of this Act, or is in violation of any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by him or by a State, or in a permit issued under section 404 of this Act by him or by a State, he may after consultation with the State in which the violation occurs assess a civil penalty of not more than $10,000 per day of violation not to exceed $75,000 in total.

"(2) In assessing such penalty, the Administrator shall provide the person in violation with notice and opportunity for a hearing which shall not be subject to the requirements of sections 554 or 556 of the Administrative Procedures Act.

"(3) In determining the amount of penalty to be assessed, the Administrator shall take into account the nature, circumstances, extent and gravity of the violation or violations, and with respect to the violator, ability to pay, effect on ability to continue in business, any prior history of such violations, the degree of culpability, economic savings, if any,

resulting from the violation, and such other matters as justice may require.

"(4) If any person fails to pay a civil penalty assessed in accordance with paragraphs (1), (2), and (3), the Administrator may request the Attorney General to collect the amount assessed plus interest in an action brought in any appropriate district court in the United States.

"(5) Any person aggrieved by a final assessment of the Administrator and who has requested a hearing under paragraph (2) may seek review in the appropriate district court of the United States only by filing an action within thirty days of the date of that assessment.

"(6) The administrator shall have the authority to issue subpoenas ad testificandum and subpoenas duces tecum in connection with hearings under section 309(g)(2) of this Act and may request the Attorney General to bring an action to enforce any subpoena under this section. The district courts shall have jurisdiction to enforce such subpoenas and impose sanctions and attorneys fees for failure to comply.

"(7) Action taken by the Administrator pursuant to this subsection shall not affect or limit the Administrator's authority to enforce any provision of this Act: *Provided, however,* That the discharge of pollutants which is penalized administratively under this subsection shall not be the subject of a

civil penalty under section 309(d) or section 311(b) of this Act.".

FELONY SANCTIONS

SEC. 9. Section 309(c) is amended to read as follows:

"(c)(1) Any person who (A) negligently violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) negligently introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which causes or may reasonably by anticipated to cause personal injury or property damage or causes such treatment works to violate any effluent limitation or condition in any permit issued to the treatment works under section 402 of this Act by the Administrator or a State, shall be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

"(2) Any person who (A) knowingly violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sec-

tions in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) knowingly introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage, or causes such treatment works to violate any effluent limitation or condition in a permit issued to the treatment works under section 402 of this Act by the Administrator or a State, shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than two years, or by both.

"(3) It shall be an affirmative defense under subsections (c)(1)(B) and (c)(2)(B) of this section that such discharge or introduction was in compliance with all applicable Federal, State, and local requirements which govern the discharge or introduction of a pollutant or hazardous substance into a sewer, or publicly owned treatment works.

"(4) Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this Act or who knowingly falsifies,

tampers with, or renders inaccurate any monitoring device or method required to be maintained under this Act, shall upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or by both.

"(5) If a conviction is for a violation of paragraph (1), (2), or (4) of this subsection committed after a first conviction of such person under the same paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

"(6) For the purpose of paragraphs (1), (2), and (4), the term 'person' shall mean, in addition to the definition contained in section 502(5) of this Act, any responsible corporate officer.

"(7) For the purpose of paragraphs (1) and (2), the term 'hazardous substance' shall mean (A) any substance designated pursuant to section 311(b)(2)(A) of this Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of this Act, and (E) any imminently hazardous chemi-

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cal substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act.".

FEDERAL FACILITIES POLLUTION CONTROL

SEC. 10. (a) Section 313(a) is amended by redesignating it as 313(a)(1), deleting the sixth through eleventh sentences, and inserting in lieu thereof the following: "The President may exempt any effluent source of any department, agency, or instrumentality in the executive branch from compliance with any such requirement if he determines it to be in the paramount interest of the United States to do so, except that all existing wastewater treatment facilities and techniques shall be utilized to their full design capacity and all reasonable efforts will be taken to comply with the requirements for which an exemption has been granted at the earliest possible date. No such exemptions shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation. Any exemption shall be for a period not in excess of three years, but additional exemptions may be granted for periods not to exceed one year upon the President's making a new determination. The President shall report each January to Congress all exemptions from the requirements of this section granted during the preceding cal-

endar year, his reasons for granting such exemptions, and progress toward achieving compliance with such exempted requirements. In addition to any such exemption of a particular effluent source, the President may, if he determines it to be in the paramount interest of the United States to do so, issue regulations exempting from compliance with the requirements of this section any weaponry, equipment, aircraft, vessels, vehicles, facilities, or other property or classes or categories of property, and access to such property which are owned or operated by the United States or by the National Guard of any State and which are essential to the national defense, except that with respect to facilities all existing wastewater treatment facilities and techniques shall be utilized to their full design capacity and all reasonable efforts will be taken to comply with the requirements for which an exemption has been granted at the earliest possible date. The President shall reconsider the need for such regulations at three-year intervals.".

(b) Section 313(a) is further amended by adding a new subsection (2) as follows:

"(2) The President may modify or suspend the application of the provisions of this Act during the period of any war declared by Congress, and during the period of any national emergency declared by Congress or the President.".

THERMAL DISCHARGES

SEC. 11. (a) Section 316(a) is amended to read as follows:

"(a) The Administrator (or, if appropriate, the State) may issue a permit under section 402 of this Act which modifies the requirements of sections 301 or 306 of this Act with respect to any effluent limitation proposed for the control of the thermal component of any discharge from a point source, upon a showing by the applicant satisfactory to the Administrator (or, if appropriate, the State) that such modified limitation will assure (1) the attainment and maintenance of thermal water quality criteria adopted under section 303 and compliance with the requirements of section 403 of this Act, or (2) the protection and propagation of a balanced population of shellfish, fish, and wildlife in and on that body of water as determined by the State (or, if appropriate, the Administrator). Before the Administrator (or, if appropriate, the State) may impose such a modified limitation, the applicant must also show that a monitoring program will be established in accordance with section 402 of this Act to ensure continued compliance with the requirements of this subsection.".

(b) Section 316(b) is amended to read as follows:

"(b) Any standard established pursuant to section 301 of this Act and applicable to a point source shall require (1) that the location, design, construction, and capacity of cooling

water intake structures reflect the best technology available for minimizing adverse environmental impacts, or (2) that other equally effective measures be applied either alone, or in combination with best available technology, to minimize adverse environmental impacts. Any standard established pursuant to section 306 of this Act and applicable to a point source shall require that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts.".

(c) Section 316(c) is amended to read as follows:

"(c) Notwithstanding any other provision of this Act, any point source of a discharge having a thermal component, the modification of which point source is commenced after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 and which, as modified, meets (i) effluent limitations established under section 301, or, if more stringent, effluent limitations established under section 303 or (ii) the requirements of paragraphs (a) (1) or (2) of this section, shall not be subject to any more stringent effluent limitation with respect to the thermal component of its discharge during a ten-year period beginning on the date of completion of such modification or during the period of depreciation or amortization of such facility for the purpose of sec-

tion 167 or 169 (or both) of the Internal Revenue Code of 1954, whichever period ends first.".

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TERM EXTENSION

SEC. 12. Section 402(b)(1)(B) is amended by deleting the word "five" and inserting in lieu thereof the word "ten".

PARTIAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM APPROVAL

SEC. 13. (a) Section 402(c) is amended by deleting the words "as to those navigable waters" and inserting in lieu thereof the words "as to those activities and discharges".

(b) Section 402(b) is amended by inserting the following after the first full sentence: "In the event the Governor submits a plan to administer part of a permit program, the Administrator may approve such submission upon a showing that—

"(1) the plan provides for administration of permit program components which represent a significant and identifiable part of the State program authorized by this section;

"(2) the plan provides for administration of the remainder of the program at a specified future date not to exceed five years from submission of the State's initial plan; and

"(3) the State has committed to making all reasonable efforts to assume full administration in accordance with the plan.".

(c) Section 402(c) is amended by adding a new paragraph (4) as follows:

"(4) In the event a determination is made (A) by a State to return administration of the program to the Administrator or (B) by the Administrator to withdraw approval pursuant to paragraph (3) of this subsection, return of administration or withdrawal of approval may only be made of the entire program currently being administered by the State.".

DAMS

SEC. 14. (a) Section 502(14) is amended by changing the period in the last sentence to a comma, and inserting the following thereafter: "this term does not include return flows from irrigated agriculture or controlled or uncontrolled flows of water through, over, or around dams with water quality effects: (i) resulting solely from such impoundment, or (ii) resulting solely from the method of release of impounded waters.".

(b) Section 402(1) is amended by inserting the following between the words "from irrigated agriculture," and "nor shall the Administrator": "nor any flow from a dam excluded under section 502(14) of this Act,".

(c) Section 303(e) is amended by adding a new paragraph (4) as follows:

"(4) Any continuing planning process established under paragraph (3) may include a process to (i) identify, if appropriate, any adverse changes in the quality, movement, flow, or circulation of any navigable waters caused by hydrologic modifications including changes caused by the existence or operation of dams, and (ii) set forth procedures and methods to control, to the extent feasible, any adverse changes caused by such modifications.".

MUNITIONS

SEC. 15. Section 502(6) is amended by deleting the word "or" where it appears before the letter "(B)", inserting a comma in place of the period, and adding the following to the end thereof: "or (C) munitions expended in the course of conventional weapons training exercises by the Armed Forces of the United States, or by its allies in joint training exercises.".

CLEAN WATER ACT AMENDMENTS OF 1982

THURSDAY, JULY 22, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, D.C.

The subcommittee met, at 2:10 p.m., in room 4200, Dirksen Senate Office Building, Hon. John H. Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee and Stafford.

Senator CHAFEE. Good afternoon.

We have three panels this afternoon as we continue our hearings on the Clean Water Act.

The first panel is dealing with BAT and consists of Mr. David H. Miller of Jones & Laughlin; Mr. Kreutzen of Chevron; Mr. Masciantonio of United States Steel; and Mr. Banks.

We will go in that order. So, Mr. Miller?

STATEMENTS OF DAVID H. MILLER, GENERAL MANAGER, JONES & LAUGHLIN STEEL CORP.; R. W. KREUTZEN, GENERAL MANAGER, CHEVRON, USA, AMERICAN PETROLEUM INSTITUTE; PHILIP X. MASCIANTONIO, VICE PRESIDENT, UNITED STATES STEEL, BUSINESS ROUNDTABLE; AND J. TAYLOR BANKS, NATURAL RESOURCES DEFENSE COUNCIL

Mr. MILLER. Mr. Tom Graham was looking forward to being with you today. The change in schedule made it impossible to be with us.

My name is David H. Miller. I am general manager of Environmental Control for Jones & Laughlin Steel Corp. I have worked in facilities planning and engineering, including environmental facilities for 36 years. The steel industry has for many years recognized this responsibility to protect and improve this Nation's environment. Today the steel industry is recommending that the Clean Water Act should be amended largely as provided in USEPA's recommendations in order to simplify and clarify it, provide reasonable time for compliance. Such a bill has been introduced in your name.

This Nation and the steel industry are faced with unprecedented economic problems.

The steel industry, the Nation's most basic industry, has been one of the hardest hit. Currently, our industry is operating at well under 50 percent of capacity. Recent statistics show that of the industry's 400,000 employees, over 111,000 workers were laid off and

another 20,000 were on short work weeks. Those were the numbers when this was written.

Today the numbers are 117,500 laid off and 24,000 on short work weeks. The industry's employment is at its lowest level since the 1930's. In addition, some 20 million tons of steel capacity in this country are up for sale or may be permanently closed. At the same time, imports of steel are at record high levels. For the first quarter of this year, imports averaged 22.8 percent of the steel used in this country. In May, they reached 26 percent.

Since the passage of the Clean Air Act in 1970 and the Clean Water Act in 1972, the steel industry has invested $4.4 billion in the air and water pollution control facilities.

In water controls, our estimates show we have invested $1.5 billion. These capital projects have resulted in significant improvements. The steel industry at the BPT level of control will be preventing the discharge of 98 percent of toxic organics, 99.5 percent of toxic metals, and 99.7 percent of all other pollutants.

According to EPA estimates, 90 percent of our BPT investment and 25 percent of our BTA requirements are already in place. The Clean Water Act mandates that industries install facilities to achieve final compliance by July 1, 1984. This deadline has become impossible to achieve. For the steel industry, EPA promulgated the effluent limitation guidelines only on May 27.

Senator CHAFEE. Mr. Miller, I don't think you have to belabor that point. We agree on the delay of the time, unless you have a specific date that you would recommend that we choose for compliance.

Mr. MILLER. We would recommend the date in the bill, July 1, 1988, and we have, as part of our testimony, a schedule that shows the very long time that it does take to do this class of work.

A further major concern which we believe to be of significant importance is a provision in the act which at times leads to treatment simply for the sake of treatment. It is known that there are cases where the installation of facilities to meet technology-based requirements will cause little or no improvement in the quality of the Nation's waters. As an example of this, a group of five steel companies, located along the Monongahela and Ohio Rivers, undertook to estimate the benefits to society of implementing proposed final standards of the steel industry. The conclusions of the study were clear that water quality changes resulting from BAT were shown to be insignificant.

Therefore, there is no justification for requiring an expense of $55 million in capital for the implementation of BAT at the facilities included in the study.

This report shows clearly one instance where the current requirements of the act result in treatment for the sake of treatment.

Based on this evidence, we strongly recommend that the act be modified to provide a waiver from technology-based requirements, but only in those cases where the discharger can demonstrate that these requirements are not needed to achieve water quality or where the requirements will not have any measurable effects upon the quality of receiving waters.

The cost savings, as I mentioned are $55 million in capital. They will also amount to $16 million per year in operating expense. This

is money which could be used and is needed today for the modernization of our industry.

To conclude, Mr. Chairman, we believe that the Clean Water Act should be amended as proposed in Senate bill 2652. However, we also urge consideration for the avoidance of expenditures which will not improve the environment; if not in this bill, then in future fine tuning of the Clean Air Act.

We thank you for your time and consideration.

Senator CHAFEE. Thank you very much, Mr. Miller. I appreciate that testimony.

Mr. Kreutzen?

STATEMENT OF RICHARD W. KREUTZEN

Mr. KREUTZEN. I am Dick Kreutzen. Contrary to the hearing agenda, I am not a vice president. I am general manager for environmental affairs for Chevron, USA.

Senator CHAFEE. Well, we would like for you to be a vice president.

Mr. KREUTZEN. I will take this back and show my boss. I am representing the American Petroleum Institute here today.

I would like to be sure the written statement of the API that was delivered to the staff yesterday is included as part of the record.

Senator CHAFEE. All right.

Mr. KREUTZEN. In the area of best available technology, there are three issues of concern to us: Deadlines, case-by-case modification of BAT, and affirmation by the Congress of EPA's authority to designate BAT equal to BPT. Regarding the deadlines, we support the July 1, 1988, date. In most cases, our review of what might be required under BAT, as we think might be proposed, we could comply with a 3-year date. On the other hand, if something unknown to us today were to happen, and depending upon the number of facilities that might be covered and depending upon the degree of technology 3 years might not be long enough.

Regarding the case-by-case modification of BAT, it is our view there are situations where industry point sources contribute little, if anything, to the pollutant loading. Where a discharger can bear a heavy burden of proof that his discharge has no significant adverse environmental impact, why require more expensive technology?

Regarding an issue of concern to us is the need to affirm EPA's ability to designate BAT equal to BPT. First, I would like to talk a little bit about the oil industry performance, not spending a lot of time. In the 1972 to 1981 period, the oil industry in the United States has spent $9 billion for waste water treatment. This is capital, operating, and maintenance. We are currently spending at the rate of $1½ to $2 billion per year for capital, maintenance, and operating costs.

Refinery BPT experience to date has shown we have recovered 95 percent BOD, 91 percent of suspended solids, 96 percent of oil and grease.

Regarding the priority pollutants, EPA and API refinery studies done recently and earlier in 1977 indicate with BPT there are basi-

cally no detectible priority pollutants except for chromium and zinc.

In the case of both of those heavy metals, the averages measured have been less than 100 parts per billion, with highs less than 200 parts per billion. This parts per billion concept has been interesting to me. I looked into it. I noticed the vitamin pill I took had 1½ parts per million zinc. That is 15 times more zinc in my vitamin pill than can be found in a litre of refinery wastewater.

It is our view that pushing the refinery effluent treatment beyond BPT can carry economic and environmental costs. One example, in my company at our El Segundo, Calif., refinery, for budget purposes we looked at what it would cost and the penalties we would have to pay to comply with EPA's 1979 BAT proposals which, as you know, for refinery effluents, were subsequently withdrawn. Nevertheless, the capital investment for that one refinery, for that facility, was estimated to be $21 million. The annual operating costs is estimated at $1½ million. The added power to generate electricity to drive the additional pumps, motors, clarifiers, biodisks, et cetera, would consume an additional 1,800 barrels per year fuel oil. That fuel oil would generate 3 tons per year of sulfur oxide emissions; the sludge generated from that facility would be 1 ton per day.

In closing, section 301 of the act requires BAT be economically achievable, which will result in reasonable further progress toward the national goal of elimiminating all pollutants. Standing alone, that would require BAT be more stringent than BPT.

While we believe that the act taken as a whole supports the administration's authority to designate BAT equal to BPT under the right circumstances, we would feel much more comfortable and much more certain to see Congress reaffirm that authority.

That ends my formal remarks.

Senator CHAFEE. I see we are in the second half of a vote. We will recess for about 10 minutes. I will be right back.

[Brief recess.]

Senator MITCHELL [presiding]. We will resume the hearing at the point at which we had to be interrupted for the vote. I don't know which of you gentlemen was speaking at the time, but whichever one was——

STATEMENT OF PHILIP X. MASCIANTONIO

Mr. MASCIANTONIO. I want to thank you for this opportunity to testify on the Clean Water Act and its reauthorization.

My name is Philip X. Masciantonio, vice president of United States Steel for Environment and Energy. However, today I am representing the Environment Task Force of the Business Roundtable, an association of executives representing a broad cross section of business.

Earlier this year, the business roundtable commissioned Environmental Research and Technology, Inc., to analyze technical issues related to the Clean Water Act reauthorization. I am pleased to submit for the record a copy of this report, and copies have been distributed to all members of the subcommittee. If the committee has specific questions Dr. James Mahoney, senior vice president of

ERT is present and prepared to discuss these findings in more detail.

I will take just a few minutes to highlight the key findings of that report. The report indicates that:

Industrial facilities are not the major sources of priority pollutants found in surface waters. On a national basis, the priority pollutant loading from industrial point sources is estimated to constitute only 3 percent to 10 percent of the total loadings.

Industrial best practicable technology [BPT] and publicly owned treatment works [POTW's] with secondary treatment already remove a high percentage in the range of 70 percent to 95 percent of priority pollutants.

A mandated change from BPT to best available technology [BAT] would produce, on a national basis, only a small additional reduction of about 2 percent to 3 percent in the quantities of priority pollutants discharged to surface waters.

General pretreatment regulations are justified. However, available evidence suggests a national categorical pretreatment program is not an appropriate mechanism for controlling priority pollutants. Pretreatment is necessary only in specific situations to achieve desired water quality or to permit certain sludge management options.

The data and findings in the ERT report provide a technical basis for our suggestions to this subcommittee concerning changes needed in the Clean Water Act.

The administration has proposed a series of constructive changes to the Clean Water Act including an extension of the compliance deadline for BAT to 1988. With the exception of the new penalty provision this bill, S. 2652, contains necessary revisions which are generally supported by the business roundtable. However, there are certain areas that require further consideration and I would like to address the BAT and pretreatment issues specifically.

The extension of the BAT compliance deadline from 1984 to 1988, as proposed by the Environmental Protection Agency, is absolutely essential. We urge adoption of that proposed change. It takes over 3 years to design and construct many industrial waste water treatment facilities. For many industries, EPA is still developing the effluent guidelines which are prerequisites to initiation of construction. Last year, Congress wisely extended the compliance date deadline for municipalities until 1988. Extending the deadline until 1988 for industry will permit an orderly and cost-effective construction program consistent with that for POTW's.

Dr. Hernandez testified before this subcommittee in February and again yesterday that EPA opposes "treatment for treatment's sake." The business roundtable is here to endorse that valid general principle. Programs which require "treatmment for treatment's sake" cheat the public and weaken the economic base of this country.

When industrial discharges, despite high levels of control such as installation of best practicable technology, continue to adversely impact water quality, more stringent controls are in the public interest. However, uniform best available technology, without consideration of need, impose costs on society unnecessarily with little or no resultant improvement in water quality.

The business roundtable recommends that this subcommittee review and modify the current inflexible requirements for best available technology. There is a need to provide a relief mechanism to the current law. In cases of facilities where BAT would require significant additional costs beyond those for BPT, and where water quality objectives can be met either at the BPT level of treatment or at some level between BPT and BAT, there should be an opportunity to demonstrate these facts and thereby obtain some type of modification of the BAT requirement that would otherwise apply.

Various formulations of a BAT relief mechanism are possible. One possibility is to expand the act's current section 301(g) modification criteria to include priority pollutants. The Chemical Manufacturers' Association, the Association of State & Interstate Water Pollution Control Administrators, the National Academy of Engineering Roundtable and other groups have recommended alternatives to achieve the same goal.

We believe a workable BAT modification provision can be developed. Congress may choose to allow States to administer such provisions where states issue NPDES permits, thus spreading any administrative burden of making such determinations fairly evenly among states and EPA. Obviously, criteria would have to be developed which would allow EPA and the States to make rational judgments on an expeditious and objective basis.

Industry has dramatically reduced its discharges into the Nation's waters over the past 5 years and notable water quality improvements have resulted. Further reductions should be required where water quality is not yet acceptable. However, any program that uses mandatory across-the-board BAT treatment as the basic means for further cleanup must incorporate some relief mechanism to allow for those situations where it is demonstrated that less stringent treatment levels are fully satisfactory to meet water quality objectives.

With regard to pretreatment, everyone agrees that general pretreatment regulations which prevent interference with municipal treatment systems or passthrough of untreated pollutants are an effective Federal tool to protect and insure proper operation of publicly owned waste treatment works. However, the present requirement of uniform categorical pretreatment by the industrial sector has proven to be difficult to develop and establishing such rigid requirements does not take into account local conditions and the water quality of receiving waters. The EPA proposal is a step in the right direction; however, we believe their proposal does not go far enough.

The key to creating a workable pretreatment program is to assure that POTW's operate in compliance with their NPDES permits wherein they achieve secondary treatment or more advanced treatment, if required by water quality-based limitations.

Since EPA studies show that POTW's with effective secondary treatment provide good removal of toxic pollutants, EPA and the States should concentrate their attention on achieving this result rather than unnecessarily and efficiently dictating the manner by which POTW's must comply.

The law should be amended to eliminate national categorical pretreatment standards. Authority for promulgation and enforcement

of pretreatment standards should be transferred to local authorities. Federal involvement in pretreatment matters should be limited to enforcing NPDES permit conditions against POTW's. The law should provide for a program of Federal technical assistance to municipalities as may be needed.

Finally, today's hearing covers only BAT and pretreatment issues. However, since this is our only opportunity to testify, I would like to indicate our opposition to the proposed modifications to the penalty provisions of the act. The Business Roundtable believes that the act presently provides adequate authority to enforce compliance with the law and that there is no need for the expanded penalty provisions of S. 2652.

I believe that concludes my formal remarks. On behalf of the Business Roundtable Environment Task Force, I wish to express my thanks for the opportunity to appear before you today. I will be pleased to answer any questions you may have.

Senator MITCHELL. Thank you. Masciantonio, is it?

Mr. MASCIANTONIO. Yes, sir.

Mr. MITCHELL. Mr. Banks, pleased to have you back again.

STATEMENT OF J. TAYLOR BANKS

Mr. BANKS. Thank you. I always enjoy the opportunity to talk about my favorite subject.

Since you have my full written statement, I will not take the trouble to provide a detailed summary. I would like to briefly touch on a few points made in that statement and react to several statements by the other panelists.

Senator MITCHELL. I wish you would at least do the latter. I didn't hear the first two witnesses.

Mr. Masciantonio made some points that seemed reasonable. What is wrong with them?

Mr. BANKS. Let me refer to the one that particularly pertains to the steel industry. It has been argued that steel, like other industries, has through the implementation of best practicable technology [BPT], removed a high percentage of the toxic chemicals in its discharge. That is true in some circumstances. There is no doubt about that. Some industries have achieved well over 90 percent of removal of those toxic chemicals. The question is, Do we have a problem with the remaining percentage of pollutants that are in those discharges? Taking steel just as an example, if you will, I would like to read into the record an estimate, and I am quoting now from an EPA document regarding the steel industry, a rather recent document. It says that—

> Environmental impact assessments conducted by the agency of proposed effluent guidelines indicated that this approach, BAT, will result in significant water quality benefits. For instance, returning to the iron and steel example, our analysis of the major discharges in this industry shows that about 75 percent of them will, by themselves, cause violations of applicable state water quality standards in absence of BAT.

Senator MITCHELL. Say that again, Mr. Banks. Repeat that last sentence.

Mr. BANKS. It says that:

Referring to the iron and steel example, our analysis of the major dischargers in this industry shows that about 75 percent of them will, by themselves, cause violations of applicable state water quality standards in the absence of BAT.

Senator MITCHELL. Mr. Masciantonio, you didn't say that wouldn't be the case in your statement, but that appears to be in sharp contrast to the picture portrayed in your statement. Do you disagree with the statement Mr. Banks just made?

Mr. MASCIANTONIO. I don't know whether the numbers were, whether they were 1974 or 1977, or what.

Mr. BANKS. May I clarify that, Senator?

Senator MITCHELL. Yes.

Mr. BANKS. These numbers are from EPA documents that were produced in about April of this year. They refer to the iron and steel regulation that was issued just about 1 month ago. What this document indicates is that three of our four steel plants, without meeting the requirements of those regulations, would violate the ambient standards that we use under this statute to determine whether we have water quality problems for those toxic chemicals. You may have taken 90 percent of those chemicals out of the waste stream, but the remaining amount being discharged is a serious toxic problem. That is precisely why EPA is implementing the BAT strategy. That is the point of the document.

Mr. MASCIANTONIO. The only point I would like to add to that, when the NPDES permit is written for a particular steel mill, it must not only satisfy whatever the Federal guidelines are, in our industry now it is BAT, but it must satisfy the State water quality requirements. I don't see that as a compelling reason for the imposition of an across-the-board BAT requirement on all of industry. Certainly I think our position is water quality standards should be met In cases where there are problems, that is time to address those on a site-specific basis.

Senator MITCHELL. Do you, Mr. Banks, feel that any other approach would be unsatisfactory or not accomplish the objective? If I understand what Mr. Masciantonio is saying, you may need this in some cases, but in other cases you don't, and why apply a uniform categorical standard to everybody, including those who don't need it? What is your response?

Mr. BANKS. Senator, the difficulty with an approach that tries to target toxic pollution controls is that we simply, as a Nation, as a scientific community, do not understand enough about the effects of these chemicals in the aquatic environment to do that accurately. Let me give you an example. For the last 6 years EPA has been attempting to devise ambient criteria for the known 65 toxic chemicals listed under this statute. They have spent millions of dollars and engaged the best scientists in the agency in attempting to derive criteria which will be acceptable by all comers. They came out with criteria a year and a half ago. Since then not only the new leadership in EPA but virtually every industry organization I can think of, as well as NRDC, have criticized those criteria as virtually useless. They are scientifically unacceptable to EPA and industry, and to NRDC they are not stringent enough.

The problem is we cannot tell you how much of a toxic chemical in the water—in the surface water situation—is an acceptable amount that can protect human life and aquatic life. If we can't do

that, we can't tell you where to install treatment controls and where not to. That is precisely why this statute takes a technology-based approach and requires an affordable treatment system to be implemented by each member of each industry segment.

Mr. MASCIANTONIO. Senator Mitchell, I would like to get back to that because I think there is something misleading in the numbers. I am not sure whether Mr. Banks is saying that in the case of the steel industry we are looking at streams where water quality problems exist in three out of four or whether he is saying that the steel industry is causing those water problems.

If I could refer to the testimony that we have submitted in the record on a report by ERT, I think Mr. Mahoney can verify that his studies have shown that the toxic pollutants which are out in the environment are not originating from industry. His information, his studies have clearly shown that even if we apply BAT across the board, we would only be attacking 2 to 3 percent of the toxic problems that exist in our waterways.

Senator MITCHELL. Mr. Banks, could I ask you to submit for the record the document to which you referred so that that would be available?

Mr. BANKS. Certainly.

Let me identify it for you. It is the last two pages of my written statement. It is a document without a title, without a signature and without a date, but I know it to have been submitted to the President's Cabinet Council. I know it to be an EPA document.

Senator CHAFEE [presiding]. Let's have order.

Mr. BANKS. It is an EPA document prepared for purposes of persuading the Council to recommend to the President not to include a BAT variance in the Clean Water Act proposal. It outlines all of EPA's reasons why a BAT variance is not workable. If you care to refer to that document, I can run through for you the leading four reasons that EPA cites for not using a water quality based approach to toxic controls.

Senator CHAFEE. Wait a minute, Mr. Banks. This document you are referring to, is this the unsigned, undated, unidentified document, and you are saying that is an EPA document?

Mr. BANKS. Yes, sir.

Senator CHAFEE. If you want to testify on your own behalf as to what you believe, I think that is fine, but to say some document is an EPA document that is unidentified and no one knows where it comes from—all kinds of documents float around in my office, Senator Mitchell's; anybody has all kinds of documents. You just testify to what you think, your views.

Mr. BANKS. Very well, Senator.

I will tell you what I think, but I would appreciate the opportunity to request that EPA tell this committee whether that is an EPA document. It seems to me the record would be enhanced by an identification of that document that EPA can certainly provide. Indeed there is an EPA representative here today.

Senator CHAFEE. We will wrestle with that, Mr. Banks.

Mr. BANKS. Very well. The first point, and I think it's a critical one, is that EPA does not intend to impose BAT controls on all American industry. Out of the 22 phase I primary industries, EPA intends to impose BAT controls on 8 industrial categories. The esti-

mated total cost to industry of meeting those BAT controls is approximately $80 million a year for all industries except the chemical industry. That industry, of course, contributes about 80 or 90 percent of all organic chemical wastes into our surface waters and will have to spend considerably more than that. The main point is that there is only one industry segment, the organic chemicals and plastics producers, who arguably need economic relief from BAT. EPA has decided to provide that sort of relief to everyone else by simply issuing weaker BAT rules.

So for all but eight industry categories, BAT will be equal to BPT, and there will be zero additional costs. That is a perfectly legitimate thing to do under the Clean Water Act. If EPA has a study that indicates there is no such thing as a reasonable further progress beyond BPT for any given industry, such as petroleum refineries, then that is all right.

What I am telling the committee is that EPA has decided that is the case for most American industry, and there will be only eight industry categories totaling fewer than 1,000 plants that have requirements beyond BPT that will cost anything. That is the No. 1 reason why there is no need to revert to a water-quality-based approach to toxic controls through variances.

The second point EPA makes in this same document—and I will testify to it as my point, if you wish—is that there are no tools with which to implement such an approach. I mentioned the water quality criteria. It is also a fact that fewer than half of the States have water quality standards for the toxics we are discussing here, and the numbers in those few States that do have standards vary all over the lot. So it is simply not accurate to say that we can tell you how clean the water should be for given toxic chemicals. The States don't have those ambient standards because the criteria EPA needs to furnish are not there, so there are no benchmarks to take that kind of approach.

The third and equally important reason EPA cites—and I concur with it—is that it would take a lot of State and Federal resources to implement such an approach. EPA estimates that it would take 1,200 workers per year, that is 1,200 people in the EPA regional offices and in the State agencies to implement a BAT variance. That is 1,200 people just to weaken the controls of the Clean Water Act.

Those, it seems to me, are enough, but the final reason EPA furnishes—and again I concur—is that in order to implement such a process, it may well take until 1990 or beyond for American industry to come into compliance with whatever controls are developed after going through that kind of rigorous process.

All of those reasons, it seems to us, add up to a fairly sound conclusion that if it is not needed, if that relief is not needed by industry, then going that kind of a lengthy and costly road to determine those controls makes very little policy sense. That is why we would say to you that the BAT approach in the Clean Water Act is sound. You have already decided that there should not be variances from BAT, and we urge you to stick by that decision.

If I might just spend a couple of minutes, then, referring to a chart at page 16 of my prepared testimony. It is simply a time line.

I would like to address EPA's 1988 deadline proposal in just a few brief moments.

Senator CHAFEE. We have a little time problem here, Mr. Banks. If you could wind up your testimony, I would appreciate it.

Mr. BANKS. Very well.

On that chart, we have listed the promulgation dates EPA has agreed to in court and has sworn it can meet. We have then shown what the dates would be 36 months beyond that, which, as Dr. Hernandez testified yesterday, is the standard period that industries need to comply with those rules. Then we have subtracted backward from 1988 to show the increments of time that would have lapsed between when industry can comply and EPA's proposed date. That average legnth of time is well over 2 years. We then calculated the amount of toxic chemicals that will be discharged by each industry in the absence of BAT controls, and the grand total of EPA's proposal is over 171 million pounds of toxic metals and organics. We simply do that to draw your attention to the significance of EPA's proposal—to the price tag of going to a 1988 deadline.

With that, I will be pleased to conclude my remarks and entertain any further questions.

Senator CHAFEE. Mr. Banks, in connection with the last point you are making, and I have this chart in front of me on page 16, your point is that the date of July 1, 1988, is too long?

Mr. BANKS. Absolutely.

Senator CHAFEE. What would you suggest?

Mr. BANKS. We would suggest that each industry be asked to comply within 3 years following promulgation of its regulation. That is, we propose that compliance be required as "expeditiously as possible," but not later than 3 years. By doing that, you would save the darkest area of these time lines for each industry. That is the amount of compliance time you could shave off from EPA's proposal.

Senator MITCHELL. Would you, as part of that, oppose the EPA request to extend the time for promulgating them? As you recall, yesterday Dr. Hernandez testified they wanted to take them all to July 1, which would extend the latest one 1 day and the earliest one some longer period of time.

Mr. BANKS. Yes; I would. I have spent the last 2 to 3 years in court demonstrating to a Federal judge through discovery that EPA can and certainly should be made to stick by the schedules in that court decree and not by any arbitrary date. They have marshalled the resources to meet this schedule, sworn in Federal court that they can and will meet it, and I believe ought to be kept to that.

Senator MITCHELL. We all know the tremendous wisdom of Federal judges, Mr. Chairman.

Senator CHAFEE. Even ex-Federal judges. I believe it was Mr. Miller who was concerned that we are getting into treatment for treatment's sake. I believe it was Mr. Miller, in his testimony, is that correct, Mr. Miller?

Mr. MILLER. Yes.

Senator CHAFEE. What do you say about that, Mr. Banks?

Mr. BANKS. Senator, I would never deny that there will be instances—and I believe they will be few—in which an industry will be required to treat to a level that may even actually be shown in years to come to have been too stringent. That is certainly a possibility. The reason why Congress chose to run that risk is that we cannot make that decision any better today, and the risk that that will happen ought to be borne by industry and not by our rivers and lakes.

The BAT concept cuts that risk, we think, to just about as small as you could ever slice it because by definition it must be economically achievable, and because there is a good deal of flexibility in the concept in terms of subcategorizing industries and providing existing administrative variances. We think the risk, given the way EPA plans to implement BAT, is almost minimal.

Senator CHAFEE. Senator Stafford, we are delighted you are here. Do you have any comments or questions?

Senator STAFFORD. Thank you very much, Mr. Chairman. No, I have no questions. I am glad we are going into these matters.

Senator MITCHELL. Mr. Masciantonio, you very briefly touched on the penalty provisions because it is outside the scope of the subject you covered, but I for one would be interested if you would submit in writing, and either of you other gentlemen, if you care to, if you hold a similar position, as to why you are opposed to the changes in the penalty provisions.

Mr. MASCIANTONIO. Thank you, Senator, we will do that. (See p. 418.)

Senator CHAFEE. Mr. Kreutzen, I think it was in your testimony that you suggested that Congress say BAT is equal to BPT.

Mr. KREUTZEN. Right, we are urging you to affirm that the Administrator has the authority to conclude that BAT may equal BPT and that more stringent technology beyond BPT is not necessarily a requirement of the act. I just heard Jim Banks confirm that EPA does have that authority.

Senator CHAFEE. That would be my view. My view is that if that is the way it comes out in EPA's determination of what BAT is, that it really equals BPT, that that's that. I don't quite see why anything would be required from us to say so here.

Mr. KREUTZEN. If you just focus on 301 and read that BAT has to achieve reasonable further progress towards the discharge goal, looking back to 1977, we find the effluent guidelines proposed, we don't think there is a good chance that the next refinery guidelines that we see a BAT will equal BPT. We have no security in that, and we don't know what is going to happen 2 or 3 years down the road or more. Whether it is done in legislative history, the report, or the act, I think we can take——

Senator CHAFEE. I will be reluctant to get it in the act, and I would leave it to EPA. As I see it, it does not present a problem. Maybe I am missing something here, and we will be glad to take another look at it based on your concerns.

Thank you very much, gentlemen. I appreciate your coming.

The next panel deals with pretreatment. We have five witnesses in this panel, Mr. Barton, Mr. Olson, Mr. Lemonias, Fran Dubrowski, and Mr. Thibault.

We will start off with Mr. Barton.

We welcome you here.

STATEMENTS OF CURTIS A. BARTON, MANAGER, ENVIRONMENTAL SERVICES, STONE CONTAINER CORP., AMERICAN PAPER INSTITUTE; JON OLSON, ROCKFORD, ILL., ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES; JAMES P. LEMONIAS, PRESIDENT, WHITMAN PLATING CO., NATIONAL ASSOCIATION OF METAL FINISHERS; FRAN DUBROWSKI, NATURAL RESOURCES DEFENSE COUNCIL; AND JAMES E. THIBAULT, JR., MANUFACTURING JEWELERS & SILVERSMITHS OF AMERICA

Mr. BARTON. Good afternoon.

I would like to thank Chairman Chafee and the subcommittee for allowing me to testify this afternoon on behalf of the American Paper Institute and the National Forest Products Association [API/NFPA] with respect to amendments to the Clean Water Act [CWA].

My name is Curt Barton. I am the manager of environmental services for Stone Container Corp., in Franklin, Ohio. I serve as vice chairman of the API/NFPA Water Quality Committee.

API/NFPA's concern with the country's water resources predates the 1972 Federal Water Pollution Control Act. We support the act. Today, the act reflects the mid-course corrections we recommended, and this subcommittee adopted, in 1977.

Last year, we began an intensive review of the Clean Water Act to determine what changes, if any, are necessary to improve the effectiveness of the act. We looked for additional opportunities to apply the guiding 1977 philosophy of avoiding treatment for treatment's sake.

We agree with EPA that only modest changes to the act are warranted. With limited reservations, we support S. 2652.

Today, I will discuss the pretreatment program. This programs is of major concern to our industry. However, there are other Clean Water Act programs which affect our members. I request permission to submit materials on these subjects for the record.

Senator CHAFEE. Fine.

Mr. BARTON. The forest industry supports the general concept of pretreatment as envisioned in section 307(b) of the 1972 act. We recognize the need for pretreatment of industrial pollutants that: Are not susceptible to treatment in publicly owned treatment works or would interfere with the operation of a municipal system. Consequently, we did not object to EPA's 1973 regulations which implemented, for the first time, the so-called general pretreatment program.

In 1977, Congress amended section 307(b) to provide POTW's with the opportunity to grant removal credits to their industrial customers. These credits would apply to any toxic pollutants which the POTW could effectively treat. Industries gaining removal credits would not be required to pretreat for the specified pollutants. EPA was to develop regulations to implement the removal credits provision.

We supported the removal credits approach in 1977. This provision was designed to serve as a continuing incentive for local industrial participation in POTW's; and assure that the removal levels

which justified the local credits would be maintained through sound POTW operation and maintenance.

Unfortunately, when EPA repromulgated the general pretreatment regulations in 1978, we found their understanding of the law was considerable different than ours. The regulations for removal credits were complex, burdensome, and unworkable.

Further, EPA encouraged local POTW's to force industrial customers to pretreat fully compatible pollutants such as BOD. This policy disregarded the Act's objective of encouraging joint treatment of compatible wastes.

Litigation, followed by settlement negotiations, appeared to have solved these problems. However, EPA failed to implement the negotiated settlement with respect to compatible pollutants in the 1981 general pretreatment regulations.

Based on this review, we have two major concerns with the current pretreatment program: First, EPA seems to encourage POTW's to require pretreatment of compatible pollutants; and second, the toxics regulatory scheme requires redundant treatment, and does not have the support of the local agencies. I will concentrate first on our concern with compatible pollutants.

Forest industry effluents are characterized by the presene of compatible pollutants such as BOD or total suspended solids. These pollutants are similar to domestic wastes. They are compatible with POTW treatment capabilities. Thus, EPA's policy regarding POTW acceptance of compatible pollutants is of critical concern to us.

We are concerned that contrary to the objectives of the act—which were not intended to require unnecessary or redundant treatment of compatible wastes—EPA continues to encourage pretreatment of these wastes.

Congress was correct, in 1982 and since, to encourage joint treatment of similar municipal and industrial wastes wherever possible. This reduces the cost to industrial and domestic users alike.

There are substantial technical benefits as well. Many industrial wastes, although highly treatable and highly bio-degradable in biological systems, lack nutrients such as nitrogen and phosphorus. Domestic wastes have an excess of these compounds. Therefore, the most efficient way to treat both categories of wastes is by mixing them in a central treatment facility.

However, since 1978 EPA has encouraged inadequate or poorly operated POTW's to require some customers to pretreat compatible pollutants. EPA apparently views this as a fair way to compensate for POTW operation and maintenance difficulties. We recognize that, in some instances, it may be less costly to require pretreatment than to increase the size of a POTW. Additionally, some slug loads may be disruptive to POTW's and may require some pretreatment. However, this should be a local decision based on individual circumstances—not a matter prejudiced by EPA policy.

We recommend amendatory language to reemphasize that Congress does not intend EPA to encourage redundant treatment of compatible pollutants. We would be pleased to work with the subcommittee to further develop this approach.

Priority pollutants are not a major issue for our industry. However, we do have some potential concerns in this area. We believe

that EPA cannot implement a workable pretreatment program until there is a better way to address toxic pollutants. The complexity and rigidity of the current pretreatment program will only produce more delays in implementing the program.

EPA acknowledges that it confounded what was a relatively clear congressional intent. As a result, after 10 years, there is still no national program, other than the general pretreatment requirements.

Yesterday, Dr. Hernandez discussed EPA's concerns and the needed changes.

In S. 2652, EPA would retain mandatory standards for certain industries in communities where the POTW is not capable of dealing with priority pollutants. We agree, however, for this approach to work, EPA must have a workable POTW exemption process. The POTW's views should be afforded substantial weight in this matter because they must make the program work.

The argument against granting these exemptions will be that localities are incapable of running an effective pretreatment program. Many local agencies are fully capable of assuring effective joint waste treatment. The record supports EPA's proposal to provide the POTW's with a more flexible program.

Some have questioned whether there is time to consider S. 2652 this year. We urge you to act on this important legislation.

The administration's bill will reduce delays and complexities in the Federal water pollution control program. This Congress should reaffirm its support for this vital program by taking such steps as: Endorsing a multiple-year reauthorization; extending the BAT/BCT compliance dates; and simplifying the pretreatment program.

Mr. Chairman, I would like again to thank the subcommittee for the opportunity to testify.

I will be happy to answer any questions.

Senator CHAFEE. Thank you very much, Mr. Barton. We appreciate that testimony.

Mr. Olson?

STATEMENT OF JON OLSON

Mr. OLSON. My name is Jon Olson. I am the district director of the Sanitary District of Rockford in Illinois and I am here today in my capacity as chairman of the Association of Metropolitan Sewerage Agencies' Pretreatment Committee. The agency is called AMSA.

Accompanying me is Ron Linton, the executive director of AMSA.

I appreciate this opportunity on behalf of AMSA to address the committee on the reauthorization of the Clean Water Act, particularly as it relates to the Environmental Protection Agency's proposals to modify existing pretreatment requirements.

This issue is of critical importance to AMSA's 87 member agencies who serve over 70 million people and thousands of industries in the Nation's major metropolitan areas. By EPA's own account, roughly 273 of the 465 facilities owned and operated by AMSA member agencies are subject to existing legislation and regulatory pretreatment requirements. This represents only about 13 percent

of the estimated 2,000 publicly owned treatment works required to satisfy Federal pretreatment objectives. However, the volume of wastewater discharged by the AMSA facilities accounts for over 50 percent of the total wastewater nationwide subject to pretreatment controls.

At the outset, I would like to reaffirm the longstanding commitment that AMSA member agencies have to pretreatment. They appreciate the importance of controlling industrial toxic waste discharges to their systems and they are dedicated to implementing environmentally sound and economical industrial pretreatment programs that address their local needs.

Many of these agencies have had effective pretreatment programs in place prior to 1972, when Federal pretreatment requirements were first imposed. And all of our agencies now have programs that either comply or will soon comply with Federal pretreatment requirements. In many cases, where needed for plant or environmental protection, these programs require industry to meet even more restrictive limitations than those being considered by EPA.

The AMSA Pretreatment Resource Reader, which I am submitting for the record of this hearing, clearly demonstrates the practical realities of pretreatment and the progress that has already been achieved through local pretreatment controls.

Developed under the terms of a cooperative agreement with EPA, the purpose of the reader is to assist smaller and less sophisticated agencies in the development and implementation of local pretreatment programs. Inasmuch as it relies on the expertise and experience of our member agencies, it reinforces the need to acknowledge the measures that these agencies have already instituted to control the discharge of industrial wastes.

Senator CHAFEE. Mr. Olson, we have a time problem here. I don't want you to race through here. Perhaps you could just choose the sections that you particularly want to stress to us, if you would.

Mr. OLSON. Then I will submit the testimony in writing in its entirety.

Senator CHAFEE. Sure.

Mr. OLSON. One of the main principal points we are concerned with is that there be local programs designed to meet local need of the local POTW and that these programs could be certified by the USEPA or State agency and be recertified or reviewed on an annual basis. We feel these programs would need to have strong directive influence in terms of what would be required for certification and we have submitted for the record and to the USEPA our feelings on that type of process that would take to become certified.

One of our objections to the submission that has come forth is that we do not feel that the requirement for secondary treatment is part of the concern of the pretreatment. The issue of secondary or primary treatment is separate from the issue of pretreatment, of a pretreatment program. In addition, we also feel the question of effluent limitations at the present time, given the state of the art and given the movement of both the States and of the EPA, are unattainable. So to establish effluent limitations—they are not technologically unattainable, probably are unattainable in the next 5 years established by the Agency or the States. I happen myself to

come from a State that has effluent limitations, but we are one of the few in the Nation that do.

One of the problems that has been stated in the proposed legislation by EPA is discharges from Federally owned facilities that discharge into publically owned treatment works. If the act were to be amended to reflect the current omission, POTWs in certain parts of the country could receive toxic discharges from Federal facilities that would greatly impact on the POTW of which the POTW would have no ability to correct for or to regulate against. We believe to exempt Federal facilities would be a major flaw in the current proposed amendments.

In sections 8 and 9, the question of civil and criminal penalties are raised. We do not believe as an agency, AMSA, that the question of civil and criminal penalties should be out of the Department of Justice. We believe the Department of Justice procedure should be followed for all criminal actions and the power of the EPA Administrator should be limited in that area, only through recommendations to the Department of Justice for enforcement purposes.

These major points are the major points of AMSA's concerns with the proposed legislation.

I would like to reemphasize a statement I did make earlier, that what comes about today is not AMSA's initial position. We ameliorated our position to obtain the type of position we have today and after discussion with EPA over the past 5 years have come to better understand the pressures they have to deal with and I think they better understand the local nees. That is what we are addressing today, a need for a locally derived program that is certified by a State or Federal body that can be applied to the local community for the local communities' need and the need for the POTW without regard to the arbitrary implementation of categorical standards for all concerned.

Thank you, Mr. Chairman.

Senator CHAFEE. Thank you.

AMSA has been very helpful to us on this committee in the past and I am sure it will continue to be in the future as we work our way through this act.

Mr. Lemonias?

STATEMENT OF JAMES P. LEMONIAS

Mr. LEMONIAS. Mr. Chairman and members of the committee, I am James P. Lemonias, president of the National Association of Metal Finishers and president of Whitman Plating Co. of Whitman, Mass.

Appearing with me today is Theodore Garrett, our counsel from Covington and Burlington. NAMF appreciates this opportunity to appear before your committee and discuss proposed changes to the pretreatment program.

Pretreatment has been an issue of major concern to members of our industry. We have found ourselves in the forefront of activities surrounding the pretreatment program as one of the first industries to be affected by EPA categorical pretreatment standards.

Thus, today's hearings are extremely important for our industry's future well-being.

We believe that the present program is unworkable and contains costly and unnecessary requirements. Therefore, we urge Congress to amend the law to allow for the development of local pretreatment programs.

We commend the EPA for their approach in recommending local control but, as noted in AMSA's statement, we think there are ways to improve upon that concept.

Mr. Chairman, NAMF has submitted a longer statement which we would appreciate being included in the record.

Senator CHAFEE. We have that and we will do that.

Thank you.

Mr. LEMONIAS. That detailed statement provides information about our industry and the impacts resulting from EPA's electroplating categorical standards. I will very briefly summarize the major points in order to provide you and the rest of the committee with a better understanding of why we feel so strongly that improvements must be made in the pretreatment program.

NAMF represents an industry of small businesses with an average electroplating job shop employing 15 to 20 people and capitalized at approximately $250,000. As small businesses, we are therefore, severely impacted by any costly regulatory requirements especially in these difficult economic times.

Existing EPA regulations for electroplating pretreatment standards, according to the agency's own estimates, will result in the closure of approximately 20 percent of the job shop firms in this country and the loss of nearly 10,000 jobs. In addition, for those surviving firms, approximately $1.3 billion in capital cost and nearly $500 million in operating cost will fall on the industry.

We submit that is a staggering and unnecessary impact on this industry.

Existing electroplating categorical standards will create inequity and uncertainty within the metal finishing industry. More specifically, existing regulations require electroplating job shops to meet certain standards by January 28, 1984. However, the granting of removal credits, an essential aspect of the pretreatment program as envisioned by the Congress, remains clouded with uncertainty and are not available. Yet, the electroplaters are being held to a January 1984 compliance deadline with apparently no opportunity to factor in removal credit provisions. The result will be redundant and unnecessary for treatment.

Moreover, EPA's intent is to promulgate final metal finishing regulations that will be more comprehensive than the electroplating standards and as a practical matter will supersede the electroplating pretreatment standards.

The result will, in effect, be a moving target for the small business job shop sector to deal with. Clearly, it is absurd for anyone to spend millions of dollars in order to meet a compliance date for one set of regulations only to have rules changed a short time later; but, Mr. Chairman, that is the situation we are facing.

These difficulties and others, which are detailed in NAMF's written statement, confirm a need to reform the pretreatment program. Such reform, we believe, can best be accomplished through

legislative change. Certainly for our industry, it is essential that changes in the pretreatment program be made this year in view of our January 1984 deadline contained in EPA's electroplating standards.

Rather than imposing national pretreatment standards across the board, Congress should permit the development of local pretreatment programs where municipalities have the administrative and technical capability and legal authority to operate such a program.

This approach is consistent with the objectives of the administration and organizations such as AMSA. Moreover, the local approach concept is soundly supported by the 1980 House Public Works and Transportation Oversight Committee Report, an EPA contracted report by JRB Associates, Inc., entitled, "Assessment of the impacts of industrial discharges on publicly owned treatment works" and a recently completed GAO report, "Report to the Administration of EPA: A new approach is needed for the Federal Industrial Waste Water Pretreatment Program."

NAMF endorses the concept of local control and increased flexibility in the pretreatment program as a responsible and appropriate implementation of the Clear Water Act for a variety of reasons. We believe that it is the ultimate responsibility of a POTW to address the problems confronting its treatment system. Each POTW is required to obtain from EPA (or from an approved State) an NPDES permit.

That permit insures that the POTW obtains certain treatment levels and meets water quality standards. Therefore, the POTW is in the best position to impose pretreatment standards in order to meet its compliance requirements and protect the integrity of its treatment system.

This is particularly true since each treatment system has unique problems to address, as do individual metal finishing firms, from a technical, environmental, administrative and economic perspective. Rigid national categorical standards leave no flexibility in regard to those differing situations.

We recognize there may be instances where a local POTW is either unable or chooses not to develop a local program. Certainly, in those instances, there needs to be some type of Federal presence and perhaps Federal standards are the proper vehicle. However, we submit that where the local POTW has the authority, expertise and desire, a locally developed pretreatment program is the most effective means for addressing water quality goals.

Let me give you a couple of illustrations. The cities of Chicago and Los Angeles have effective local programs that include pretreatment limits for metals and other pollutants. These existing local limits are adequate to prevent interference and passthrough in those cities. Electroplaters have already installed costly equipment to comply with these local limits. Yet, electroplaters in these cities will have to spend millions of dollars on new equipment to comply with EPA's Federal standards.

We submit that this local approach is all that is really needed in the way of Federal program. EPA's general regulations would assure that there were no sludge disposal problems, and that the municipalities comply with their NPDES permits.

This would allow the pretreatment program to be based on local conditions, and would be consistent with the congressional objectives of encouraging State programs, reducing Federal involvement to a minimum, and avoiding redundant treatment. It would also emphasize treatment necessary to meet water quality requirements.

Congress has recently funded the POTW construction grant program, a program that is sound. Centralized local municipal waste treatment makes sense from an environmental, technical and economic viewpoint. However, we believe that it is folly to spend these billions of dollars on municipal systems and then ask industry to spend billions more in redundant private treatment systems absent a local need for more treatment of specific wastes.

A targeted, local approach would obviate the need for automatic, rigid national standards. However, under the local control concept, such standards could always be imposed as necessary.

In conclusion, let me say that our commitment to a clean environment is as strong as our commitment to the overall success of the industry. We know that we cannot have one without the other. I appreciate this opportunity to present our concerns with the pretreatment program and will be happy to answer any questions.

Senator CHAFEE. Gentlemen, and Ms. Dubrowski, we have a vote on. Now is a good time for us to adjourn to go to that vote. Unfortunately, I will be tied up for a few minutes. Senator Mitchell said he would be good enough to take the balance of this panel and I will return as soon as I can.

Mr. Thibault, I want to welcome you here and say I regret that I won't be here for your testimony. But you submitted it, have you not?

Mr. THIBAULT. Yes; I have, Mr. Chairman.

Senator CHAFEE. I will take a good close look at that. I will return as soon as I can. Meanwhile, we are grateful to Senator Mitchell for taking over in the interim. We will have a recess now.

[Brief recess.]

Senator STAFFORD [presiding]. The subcommittee will please come to order.

In the interest of trying to move ahead, I am going to take over temporarily. Senator Gorton is here, so I will turn the gavel over to him.

I just called the committee to order. Mr. Thibault is the next witness.

Senator GORTON [presiding]. Mr. Thibault, please proceed.

STATEMENT OF JAMES E. THIBAULT, JR.

Mr. THIBAULT. Mr. Chairman, my name is James Thibault and I am here representing the Manufacturing Jewelers & Silversmiths of America.

This trade association has some 2,000 manufacturers of jewelry, silverware, and allied products within its nationwide membership. Approximately 1,000 or one-half of the membership is located in the Greater Providence, R.I., geographical area. Including the Attleboros of Massachusetts, this New England industry employs, even with today's reduced work force, over 32,000 people. It is the larg-

est commercial employer in the State of Rhode Island and this industry is comprised primarily of small businesses.

The electroplating process is an intricate part of manufacturing jewelry, particularly costume jewelry and plated silverware. This process produces a number of wastes considered by the Environmental Protection Agency as toxic.

A little over 3 years ago, thanks to a Federal grant by the Economic Development Administration, the manufacturing jewelers and silversmiths of America embarked on an 18-month long technical study of this problem of electroplating waste discharges to publicly owned treatment works.

Over 400 producers of these wastes were identified in this geographic area. Through extensive plant testing, the type and quantity of each of these wastes was identified. This initial phase of the study determined the breadth and scope of the environmental problem being created by these electroplating wastes, and the conclusion was that the problem was indeed substantial.

The second phase of the study produced a number of other conclusions. In condensed form, they were twofold:

No. 1, with relatively small expenditures for capital equipment, most plants could substantially reduce their water consumption and the volume of aqueous waste that they were producing.

No. 2, the best economic environmental solution for these plants would be a combination of inplant concentration and detoxification of these wastes and a central facility that would recover the valuable metals that most of these wastes contain.

With this information in hand in late 1980, the industry began initial corrective measures of water and waste reduction to achieve compliance with the "final" electroplating categorical standards.

This has proven to be a false start and recent efforts in this direction have since been significantly reduced.

There are primarily two reasons for this: One is the severe decline in jewelry sales, allowing little capital available for waste treatment. But probably more significant has been the recurring regularity agency changes in the final standards and their deadline dates and the confusion caused by the complexity of some of the regulations.

At present, most shops need technical and legal assistance just in defining what their requirements are. Are they an integrated facility, electroplating facility or metal finishing facility under the regulations?

The answer to this question determines not only the applicable discharge limits which must be met, but also the date by which compliance must be achieved.

Because of the significant vacillations in regulatory requirements in recent years and the subsequent inability of an industry to accurately define regulatory requirements with certainty, we propose that:

First, the final compliance date for electroplaters be two years following enactment of the 1982 Clean Water Act amendments;

Second, that the latest final categorical standards for electroplaters remain in effect, and,

Third, that it be emphasized to industry that the new dates are firm and fixed.

With this firm foundation, the industry can resume its efforts toward compliance without its present concern that any newly purchased waste treatment equipment will become obsolete due to changes in the standards.

One other point. Although we support the philosophy of publicly owned treatment works providing removal credits and exemptions from standards to industry, we feel it is not practical to assume that POTW's in the Northeast are willing to meet the requirements placed upon them by this bill. Much research would be necessary to establish the acceptability of removal credits and exemptions on a permanent and continuous basis, and the electroplating industry would not be left with much time for compliance should research results be negative.

Rather, we support the concept of uniform Federal guidelines wherein all POTW's would apply the same effluent quality standards to a particular industrial classification.

In a small State such as Rhode Island we have 14 sewer districts and 9 different standards. Some local jurisdictions as yet have no numerical standards while others totally prohibit discharge of certain metals.

Since the effluent from the POTW's end up in the same receiving body, these variations in standards only serve to adversely distort the competitive relationships between companies.

In closing, we have two questions to ask concerning this bill. They are:

No. 1, is it intended that the existing electroplating standards and their compliance date shall continue in full force and effect after the date of enactment of the 1982 CWAA?

That is how we interpret the bill.

No. 2, how is it to be determined that the POTW will not violate that effluent limitation or standard which would be applicable to such pollutant if it were discharged by such source, that is an industrial source, other than through a POTW considering electroplating effluent limitations are established in units of parts per million?

It seems difficult. We would be pleased to answer any questions the committee may have at this time.

Senator GORTON. Thank you, very much, Mr. Thibault.

Our last witness on this panel will be Ms. Dubrowski from RDC.

STATEMENT OF FRANCES DUBROWSKI

Ms. DUBROWSKI. Thank you.

With the time constraints, I would like to highlight the major points of my testimony.

Senator GORTON. We would be delighted and your entire written testimony will of course be included in the record.

Ms. DUBROWSKI. Thank you, Senator.

I would like to begin by commenting that the national pretreatment program which you are now considering is of vital concern to us. It is one of the Clean Water Act's most important programs for controlling toxic water pollutants.

Each year, approximately 246 million pounds of toxic pollutants are dumped in POTW's. These pollutants can cause three serious

problems. They can pass through the treatment plant, causing the same harm as if they were dumped directly in a waterway. They can interfere with the plant's operation or they could expose municipal workers in the plant to toxic fumes.

Finally, they can contaminate the sludge that results from the treatment process. Contaminated sludge is of concern because it is more expensive to dispose of and, if you don't dispose of it properly, the chemicals in the sludge can seep out into ground water and drinking water supplies. They can be picked up in the food chain when they permeate the soil; they can end up in the air being incinerated with the sludge.

For these reasons, the Congress set up a program to pretreat toxic wastes before the wastes were dumped in municipal sewage treatment plants.

We believe this program is already quite flexible, that it relies upon Federal regulation only where Federal regulation is essential, and that it leaves substantial discretion to State and local governments.

Of the 15,000-plus POTW's nationwide, only 2,000 need to develop a pretreatment program. Even here, the Federal regulations cover only the biggest industrial polluters. They cover some 34 major industrial categories known to discharge substantial amounts of toxics. This means that 40 percent of the Nation's industrial flow is not covered by uniform national standards.

Congress also left a substantial role to State and local governments in this program. The one major requirement they must meet is that they must enforce the uniform national standards.

This program has now reached a critical turning point. The national categorical standards must be developed under a court order by May of next year. Local programs must be in place by July of next year.

In this context, EPA is presenting Congress with a bill that would sharply reverse the direction of the pretreatment program. EPA is asking to replace Congress as the architect of the program and to be given discretion to decide which, if any, of the major toxics-generating industries should be subject to national standards, when, if ever, those standards should be issued, and how strict the standards should be.

I would like to run through a list of some of the major changes in the law the EPA bill would entail. The bill would eliminate EPA's obligation to establish national standards for the 30 major industrial categories that don't yet have standards.

It would eliminate EPA's obligation to enforce the existing standards; EPA would have discretion to remove those standards if EPA no longer felt they were necessary or reasonable. It would eliminate deadlines, leaving the timing of any decisions to EPA's discretion. It would eliminate EPA's duty to update the Federal pretreatment standards. That would also become discretionary. It would eliminate much of the congressional guidance on how strict the standards should be. And, most troubling of all, it would allow EPA to grant both industries and municipalities broad exemptions from the law.

EPA has tried to create a safety net for these exemptions. But EPA's safety net comes down to three principal elements: Compli-

ance with effluent limits based on secondary treatment; compliance with sludge guidelines; and effluent limits based on water quality standards for toxic, pollutants, regardless of how strict the limits may be.

This safety net is nothing more than a collection of gaping holes in the toxic protections available to the public.

First of all, secondary treatment is designed to control conventional, not toxic, pollutants. EPA will claim there is some incidental removal of toxics, but EPA's claims are based on well-operated plants. They don't represent the POTW population nationwide.

Even when we look at removal efficiencies, they vary widely from plant to plant and from pollutant to pollutant. So, for example, if we look at a toxic pollutant like nickel, EPA's data shows that it is removed with an efficiency of 32 percent by a POTW. If we look at mercury and some other well-known toxics, they are removed with only 50 percent efficiency. And sometimes when these pollutants are removed, for example, if they are metal toxics, they end up in the sludge. The problem there is that EPA has never developed comprehensive sludge guidelines.

So EPA's safety net comes down to essentially effluent limits, but the effluent limits condition is so vague as to be meaningless.

As this committee heard earlier today, very few States have water quality standards for toxic pollutants. So the basic benchmarks for decisions on effluent limits are not in place. In addition, EPA's language is so vaguely written it doesn't specify when the limits have to be in place, how they have to be attained, or what they must accomplish. It merely says they must exist.

We think this is a sharp change in direction in the pretreatment program. EPA's data shows the need for national standards. Only 25 percent of the POTW's studied by EPA had the basic elements of a pretreatment program in place. By that I mean a sewer use ordinance, a permit mechanism, and a monitoring and enforcement program; 36 percent of the plants had not yet completed an industrial waste survey to identify the volume and toxicity of incoming pollutants. Without that information, they cannot be prepared to protect the plant itself, much less sludge or water quality.

Approximately two-thirds of the plants didn't monitor for incoming toxic metals or organics.

To the extent that any controls at all were in place, over a third of the local officials explained they had those controls because of Federal pressure.

Congress is now being asked to reduce this incentive less than a year from the date when the major components of the program—that is, local programs and national categorical standards—are in place. It is being asked to shift to an approach that may take years to implement. The environmental price tag for that shift is substantial—millions of pounds of toxic pollutants each year.

We strongly oppose this proposal and we ask Congress to reject it.

Thank you.

Senator GORTON. I thank you and I thank you all.

A number of members of the committee and subcommittee have questions on specific subjects which we will submit to some or to all of you in writing and ask for your attention.

I will have one or two general questions now and invite any member of the panel to comment.

Starting with the proposition to which a number of you have referred, EPA's proposals contain a local opt out provision. What should any legislation which considers such an opt out provision include as a threshold test for the capacity or willingless or ability of local communities to provide effective controls in order to allow that opt out to take place?

Mr. OLSON. I think there might be a misnomer here. We certainly are not wishing to have an opt out position. As a matter of fact, it is probably going to be more difficult for a local POTW to put together a good local program and enforce it on their own.

For them to carry this out in a local community, because there are other considerations, other than just the technical side, like political and economic considerations, but I think in our prepared testimony we have put together a schematic of a detailed program which we will submit in writing, if you wish, in more detail. But we do believe there has to be legal, financial, technical, and analytical and administrative capability to insure all of this and we have to demonstrate that by all of the appropriate mechanisms by which it is designed and demonstrated. Only then can we begin to have the capability to obtain certification.

Senator GORTON. Would it be sufficient if we just used the word "adequate" without further definition?

Mr. OLSON. I don't like the word "adequate" because it is sort of like a minimum word—you just barely make it inside "You have done a good job."

I make no bones about it, I believe a recalcitrant POTW should not be allowed to have certification. They must have a proper program that is above adequate.

Mr. LINTON. Let me add, if I may, to our position on that.

What we have tried to do is provide quantitative criteria rather than qualitative so that it can be clearly established that an agency does and can prepare an acceptable program. And the test is, not only do you submit the definite proof of your competency, but the program must come about, so the State and EPA will be able to determine at the same time whether the proposed local standards for pretreatment are, in fact, acceptable under the statute and the regulations.

This is not a cop out or opt out. This is an either/or. Either you do it for an acceptable local pretreatment program or you meet pretreatment standards.

Senator GORTON. Do any of the other people wish to comment?

Ms. DUBROWSKI. One of the things often lost in this debate is that this law already has a local option provision in the sense that EPA has authority to create removal credits. Industries can get relaxations of the standards if the local POTW can show that it has the ability to remove the toxic pollutants. That, we think, is a much safer option than the creation of a new scheme based on water quality standards and sludge standards that are not in place.

Senator GORTON. Do most or all of the permits for large cities at the present time contain parameters for toxic pollutants?

Ms. DUBROWSKI. No, they do not.

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Senator GORTON. On that assumption, are we now simply substituting dilution for control of pollution?

Mr. LINTON. Under our assumption, the permits would have to be modified to contain the local standards that were acceptable so there was a standard on the toxic pollutants.

The fact they don't exist doesn't mean they cannot exist. That is part of what has to be done under the local program.

Ms. DUBROWSKI. The EPA bill does not exactly require that. It says there must be an effluent limit or a commitment to getting effluent limits in place. It doesn't require the limit to exist; it doesn't specify the deadline for the limit to be in place; it doesn't specify that the limit must be being attained at the time. It doesn't say how long a compliance schedule for attaining the limit can be.

Senator GORTON. Do you feel each of those should be statutory requirements?

Ms. DUBROWSKI. Certainly if we were going to do that sort of approach. We are not favoring that sort of approach. The problem with the effluent limits is that the States have not set water quality standards for toxics. They have set them for some but very few. So the criteria are not in place in which to work backwards and determine what effluent limits should be for toxics. That is why this committee went to a technology-based approach rather than a water quality based approach when it wrote this law.

Senator GORTON. As I say, there will be a number of other, probably more specific questions submitted to some or all of you in writing. I appreciate very much each of you for the contributions which you have made.

Our third panel will be that of the chemical industry.

Mr. Throdahl, you may introduce your colleagues and proceed because we do want you to summarize what you have to say in approximately 5 minutes.

Your entire statement will, of course, be included in the record.

STATEMENTS OF MONTE C. THRODAHL, SENIOR VICE PRESIDENT, MONSANTO CHEMICAL CO., ACCOMPANIED BY JOHN YOST, PRESIDENT, MUSKEGON CHEMICAL CO.; MICHAEL PIERLE OF MONSANTO; ROBERT MATTHEWS, ATTORNEY FOR ENVIRONMENTAL LAW, UNION CARBIDE; AND JOHN R. YOST, PRESIDENT, MUSKEGON CHEMICAL CO.

Mr. THRODAHL. You want us to summarize in 5 minutes?

Senator GORTON. Approximately, yes. Just your testimony.

Mr. THRODAHL. For the record, then, I am Monte Throdahl, senior vice president of Monsanto Co.

I would like to introduce my guests. Mr. John Yost, president of Muskegon Chemical Co. of Whitehall, Mich. He is representing the Synthetic Organic Chemicals Association.

On my left is Michael Pierle of Monsanto; and on my right, Mr. Robert Matthews, who is an attorney for environmental law with Union Carbide.

The three of us are representing CMB.

I will speak on behalf of CMA; Mr. Yost will speak for SOCMA.

Mr. Pierle and Matthews are here to help with questions, if there are any.

I think it is important to note the chemical industry individual operations are multitudinal; there are over 2,000 locations. They use at least six different raw materials and processes and make lots of different products and their plants are different ages and different sizes.

All of these have one thing in common and that is they are going to be affected by this administration's proposed Clean Water Act amendments. Therefore, we have a very direct and material interest in the reauthorization. We appreciate being able to be here and summarize our views for you.

Let me suggest there are a couple of basic points about the proposal which may not be well understood. The BPT of the acts of 1972 and 1977 require generic standards for regulations that they get to issue. It is not well understood that both the chemical industry and EPA have successfully negotiated case by case results-oriented permits, and the results from the technology of aerobic biological treatment have been much better than either EPA or the industry expected.

Let me remind you that generic standards which are meaningful and effective for implementing BAT will be even more difficult to develop than those for BPT. Meanwhile, our industry, working with EPA, can negotiate improvements in toxic pollutant removal. Improving results can continue to be achieved—again on a case-by-case basis—with the inclusion of a BAT modification, and that is what we are proposing.

Let me give you four reasons why. Because the number of applications are not going to be large, they are manageable; second, because the appropriate agency resources are not in place and; third, because this case-by-case practice as we propose does have appropriate checks and balances to assure the results are reached fairly and; fourth, and I think most importantly, because the explicit freedom to innovate new ways of achieving better and better water quality results is the fastest way we know how to achieve the ultimate goals of the act.

We say your goal and our goal is to assure that the Nation's water quality continues to improve through the optimal location of resources in solving the problem in an efficient and timely manner and the results we seek can be achieved through the application of the rule reading.

That is the basis of our desire to see the BAT modification. Rather than defend that proposal in any more detail, I would like to move then to allow Mr. Yost to present his story on pretreatment.

Senator GORTON. Mr. Yost?

STATEMENT OF JOHN R. YOST

Mr. YOST. Over half of SOCMA's member companies have annual sales of less than $50 million, which is quite small for the chemical industry. Our company's sales are $2 million which is very small for the chemical industry, and 25 employees.

We have submitted a written statement.

Senator GORTON. It will be included.

Mr. YOST. We certainly have an interest in pretreatment. As many as 75 percent of our members discharge into some form of POTW or municipal system. To my knowledge, none of us disagree there are certainly times when pretreatment is essential and that has all been brought up before.

However, we do believe that information that is now available that wasn't available before should somehow affect the change in this pretreatment policy. And that change, in our opinion, would be to place primary responsibility on local authorities to identify local problems requiring pretreatment and to develop, implement and enforce these requirements to achieve the purposes of the act.

We do not believe reliance on categorical standards is the way to go. In fact, we think the practice should be abandoned.

The present strategy is based on the fact these standards would be developed, that they would be available and then could be fine tuned by removal of credits. EPA has struggled for 10 years with this concept. We think they have been unsuccessful.

The studies now available suggest that POTW's have a previously unrecognized capability in treating industrial waste. In fact, the GAO reported "POTW treatment has shown to achieve significant removals of toxic pollutants."

Many municipalities have developed effective pretreatment programs and I am sort of proud of the system we belong to in Muskegon County. It is called the Muskegon County Waste Water Management System.

I would like to introduce in the record the guidelines and regulations for this system which I think would be instructive. Also despite some previous comments made here today, we have worked out 50 or 60 pollutants, with limitations, maximum concentrations, et cefera, so I know there is at least one system that does have such data available and in force.

I think the best way I can illustrate my concern is to give an example from experience we had with our system. A chemical that we discharged, which is called triglycol dichloride, was found to appear in small amounts in the POTW effluent and the officials of the system expressed their concern to us.

This compound is not a listed priority pollutant but it is a chlorinated hydrocarbon.

Together we worked out a pretreatment program to lower the discharge of the pollutant into our system. Monitoring results so far shows this reduction plus the biodegredation of the system is leading to a successful solution to the problem.

The important point is that the cost of this pretreatment to us which amounted to $50,000 was a very large sum of money to us. In fact, it is equal to our whole regular capital budget for that year.

Now, our fear was this number could have been much larger than that if there had been a categorical standard on this compound which might have told us to reduce to a lower number, not taking into consideration the capabilities of the system we hooked into.

So, therefore, we feel this is a prime example of the way local industry and a system can work together to solve these problems.

Even EPA's suggested amendments to section 307 seem to us at least to be cumbersome. They do indicate a little bit more flexibility, but the retention of the categorical standards will not accomplish the objectives. Therefore, I would say we would urge you to return control over pretreatment to the local level placing responsibilities on the POTW's to establish pretreatment requirements with oversight as required by EPA or the appropriate state agency. SOCMA firmly believes that this direction will result in programs which will protect POTW operations, insure compliance with the permits, safe sludge disposal and allow more cost-effective treatment of both industrial and municipal waste.

I thank you for letting me appear.

Senator GORTON. Go ahead.

Mr. THRODAHL. I want to make one summary point.

Senator GORTON. Certainly.

Mr. THRODAHL. With respect then to our position and our proposal, we do not propose eliminating and we recommend strongly that Congress should address the BAT issue now because EPA is preparing regulations that will have to be met probably sometime in 1988.

Permits in some industries are being negotiated now or they will be in the coming months and we suggest action on your part is certainly needed within the next 10 to 12 months.

There is no question in our minds, we have suggested this in our written testimony, that the BAT modification scheme that we propose can be made to operate in a very straightfoward manner and we think we know how to do it.

I won't take the time to illustrate the point, but we would like to close on that note for the record, sir.

Thank you.

Senator GORTON. As you know, the bill which the administration has caused to be introduced and which is the reason for these hearings does not include a BAT waiver now.

Is it your recommendation, and I spoke to both of you in this respect, that the committee should move forward with the EPA bill and await recommendation on that subject later or simply ignore the EPA's view on that subject and go ahead with what you all have suggested?

Mr. THRODAHL. I would like for Mr. Pierle to respond.

Mr. PIERLE. I think it is terribly important to understand and read. In the middle of EPA's written testimony, they do not significantly exclude for ever the BAT waiver. It is just a question of time. We feel that time is now. We feel that comprehensive amendments to the bill are important. If those can take place on all aspects of the bill this year, then so much the better, but if it takes to go into next year in order to get through a comprehensive review of the bill, then we feel that time may well be spent.

If it is necessary to report a bill out this year, we would indeed need to come back and reexamine the BAT waiver. If that is not complete, at the same time we would suggest that the funding authorization be continued for a year and that the compliance deadlines be continued for a year. But this issue is extremely critical to us and we feel it needs full exploration. And as Mr. Throdahl has said, we feel we have detailed in the written statement what we feel is a workable procedure for a BAT modification scheme.

Again, we are for more control of toxic pollutants. We are not for less control or for the addition of toxic pollutants. It is really where we are going to control the toxic pollutants next, in a timely and a least cost fashion.

Senator GORTON. That really leads to another question, perhaps for you and for Mr. Yost. That is, what is the nature and scope of the information on toxics which is available to us now which was not available when this statute was written which would cause us to make some changes.

Mr. YOST. There are several studies and I don't know them all.

Senator GORTON. I don't mean you have to give me a complete list.

Mr. YOST. There is a 40-plant POT study that was done; there is the GAO report which summarizes several studies that were done for EPA and just in our little system, there has been at least two major studies of the fate of toxic organics in the system, one about to be released and one which has some very good data which show the effectiveness of the systems in dealing with organics.

I forget that exact numbers, but 50 or 60 of these materials going into the system and almost none of it coming out the other ends.

Our system is slightly different than most systems in that it is a spray irrigation system and, therefore, it doesn't develop, for example, lots of sludge. Sludge is a problem other people may have more concern with than we do.

Senator GORTON. Presumably the toxics go somewhere. What happens?

Mr. YOST. A large percentage into biodegradation.

Mr. PIERLE. I would like to add to that because I think Mr. Yost has addressed some of the pretreatment studies. There are a substantial number of studies which also deal with the level of pollutant reduction that has been achieved by the facilities that were installed in many of the, what I would call, the first round permits and up to mid-1977. Substantial amounts of data and information has been developed for the plastics industry as a result of EPA's efforts to establish the EPA guidelines.

Amonst those are several studies in Oklahoma State, the 40-plant study that was mentioned and also a study that was mentioned yesterday was the EPA, CMA, the 5-plant study which was a continuation of gathering of data as part of the effluent guidelines process.

I think we need to put that report in perspective that it is one of the series of reports in data gathering information aimed principally at determining the effectiveness of current treatment systems and the levels of pollutants that are coming out of those systems.

So we feel there is a substantial amount of data that are available.

Senator GORTON. Our chairman, Senator Chafee, has returned.

Senator CHAFEE [presiding]. Thank you, Senator Gorton.

Mr. Pierle, getting back to the question Senator Gorton asked you, you gave an answer that I am not sure I understood, about whether to proceed with the bill this year.

What are your druthers on that?

Mr. PIERLE. I think the druthers depend upon the legislative schedule and what is possible. We feel the two issues of ultimate

importance to our industry are both the BAT waiver and pretreatment, and if there is to be a bill this year, we would certainly like to see those issues fully addressed through the legislative process.

Senator CHAFEE. Let's assume that since neither the administration has recommended it nor has this committee indicated much enthusiasm for BAT waiver, so the legislation presumably as of this time, would not include a BAT waiver, now where are we?

Mr. PIERLE. I think if it would not include and I don't know whether you are eliminating that for all times——

Senator CHAFEE. No, nothing is eliminated for all times.

Mr. PIERLE. If I would assume it was eliminated during this year, that we would like to see a 1-year reauthorization to continue the EPA funding and the transfer of moneys is necessary to keep the programs viable, a 1-year extension of the deadlines to give some certainties to the dischargers and to come back next year and to, in essence, revisit any of the remaining issues, one of which we would hope would be further investigations into the merits of BAT waiver.

Mr. THRODAHL. Senator, it is possible we have done a very poor job in trying to explain what to us seem to be a very logical system. It really is not esoteric, but I would plead for an opportunity for an appropriate kind of an audience to literally try to explain to you why this is a workable, reasonable approach and absent this, we and others are going to be tied up with some very rigid procedures to follow that don't make any sense and it knocks out the whole opportunity to be innovative.

Senator CHAFEE. Mr. Throdahl, I just want to say this, that we will study your testimony.

I am sorry I wasn't here for it but we have your statement, and we will try to do everything we can, first of all, to encourage the various industries to be innovative. That is what we want to the greatest extent possible.

Mr. THRODAHL. When something is procedurally driven, that is the best way to stop innovation and that is what BAT will do.

Senator CHAFEE. We have your views on that.

Mr. THRODAHL. Thank you.

Mr. PIERLE. I wonder, if possible, if I could expand on one other point, and that really deals with how we have achieved the successes that have been achieved to date. Very simply, I think it is terribly important, again, to understand that those were achieved through case-by-case negotiation of permits.

I guess a simple way of putting it, if we had waited on EPA's BPT effluent limitation guidelines as envisioned in the act, we would not yet have installed BPT facilities. So we are at least 5 years ahead of that game today. Our concern is that if we wait the next time for BAT studies, as was stated yesterday, those won't be out for our industry until maybe 1984, it is going to be longer before we can get the BAT and we feel——

Senator CHAFEE. Say that again. The guidelines for your industry won't be out until when?

Mr. PIERLE. Our understanding is the final guidelines for the organics and plastics industry, my understanding is that they are probably mid-1984 final guidelines.

Senator CHAFEE. I have a consent decree they have to have them out by July 1.

Were you here for the testimony of Dr. Hernandez yesterday?

Mr. PIERLE. I believe the proposals are due next year and the final regulations are due within a year later, I believe.

I would further make a point that in one of Mr. Isaac's comment and the direct quote is in our testimony, that for our industry it is the most technically challenging job EPA has and excess of $100 million spent by EPA trying to establish BAT, a substantial part of that has been spent within our industry.

We, quite frankly, are not optimistic that guidelines for our industry can be developed just simply because as Mr. Throdahl stated, the complexity of the industry does not lend itself to categorical standards that can be uniformly applied.

We feel that the 1977 program—we go case by case as to how we achieve the results and we will indeed be back to that process again. And the waiver will give us flexibility to work with EPA and the permit writers to achieve additional controls where necessary to meet the water quality goals of the act.

Senator CHAFEE. We recognize that yours is the most difficult and challenging industry in this area.

We appreciate your views and certainly will take them under consideration.

Senator GORTON. Thank you all very, very much for being with us.

[Whereupon, at 4:25 p.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

TESTIMONY

OF

THOMAS C. GRAHAM
PRESIDENT AND CHIEF EXECUTIVE OFFICER
JONES & LAUGHLIN STEEL CORPORATION

Mr. Chairman and members of the Subcommittee, I am Thomas C. Graham, President and Chief Executive Officer of Jones & Laughlin Steel Corporation, a subsidiary of the LTV Corporation. I am pleased to appear today on behalf of the American Iron and Steel Institute, a trade association which includes 63 domestic corporations representing 91% of the steel production capability in the United States. I would like to point out, Mr. Chairman, that prior to my present position I spent approximately twenty years in facilities planning and engineering, so that I speak with strong personal knowledge of the subject of capital requirements and of the time required for process development, design engineering, facilities construction, and shakedown.

The steel industry has for many years recognized its responsibility to protect and improve this nation's environment. We have supported and will continue to support the environmental objectives of the nation as established by the Congress, and, specifically, the objectives of the Clean Water Act. My testimony here today is based on the premise that, without compromising the fundamental goals of the Clean Water Act and of the nation's program to achieve clean water, the Clean Water Act should be amended largely as recommended by U.S. EPA to simplify and clarify it and to provide reasonable time for compliance.

In discussing this issue, it is impossible to overemphasize the importance of time and money. We in the steel industry believe that these are the most troublesome factors in carrying forward a balanced program of economic growth and environmental progress.

Today, this nation and the steel industry are faced with unprecedented economic problems. I don't need to tell you that the American economy is in a deplorable state. National unemployment is at the highest level since the Great Depression. The real gross national product of this country actually decreased at an annual rate of 4% in the early part of 1982. While these conditions affect almost every segment of our society, the steel industry, the nation's most basic industry, has been one of the hardest hit. Currently, our industry is operating at well under 50% of capacity. Recent statistics show that, of the industry's 400,000 plus

employees, over 111,000 workers were laid off and another 20,000 were on short workweeks. The industry's employment is at its lowest level since the 1930s. Some 20 million tons of steel capacity (about 15 percent of the total) in this country are up for sale or may be permanently closed. Yet, at the same time, imports of steel are at record-high levels. For the first quarter of this year, they averaged 22.8% of the steel used in this country. In May they reached 26 percent. This high import level is directly attributable to the impossibility of our private enterprise industry to compete against overseas industries which are directly and indirectly supported by foreign governments.

Mr. Chairman and members of the Committee, I realize that the concern of this Committee is not directly with the economy or with the trade problems of our industry. Nonetheless, they must be considered in completing this country's environmental program. It is our opinion that, among other things, the solution to the economic problems this nation faces lies in modernization of industry to increase productivity, to provide jobs, to utilize energy more effectively, and thus to produce competitively. We further believe that growth and modernization are fully compatible with rational environmental policies. We would emphasize the fact that new modern facilities are inherently cleaner than older existing plants. At this stage in the evolution of the water pollution control program, amendments to the Clean Water Act are essential to permit prudent use of our environmental spending.

Let's look at environmental control and what our industry has spent and accomplished to date. Since the passage of the Clean Air Act in 1970 and the Clean Water Act in 1972, we have invested 4.4 billion dollars in air and water pollution control facilities. In water pollution control, our estimates show that we've invested 1.5 billion dollars which is in general agreement with data recently published by EPA. These capital projects have resulted in significant improvements. Data in the Development Document published by EPA in connection with recently issued effluent guidelines show that the steel industry, at the BPT level of control, will be preventing the discharge of 98% of the toxic organics, 99.5% of the toxic metals, and 99.7% of all other pollutants. This is a record we all can be proud of.

It is from this background of a very troubled economic situation and an industry which has come a long way toward solving its water-pollution problems that I would like to discuss amendments to the Clean Water Act.

The most important issue today is time for compliance. The Clean Water Act mandates that industries install facilities to achieve final requirements by July 1, 1984.

This deadline has become impossible to achieve. The first essential step toward final compliance is the issuance by EPA of effluent limitations guidelines. For the steel industry, EPA promulgated the effluent limitations guidelines only on May 27, 1982, less than two months ago. For most other industries, final guidelines have yet to be issued. From this recent publication of the steel industry's guidelines to July 1, 1984 is a period of only 25 months. The second step toward final compliance is incorporation of guidelines into NPDES permits establishing requirements for specific plants. I can tell you, based on my own experience, that the lead time from permit requirements to routine operation of complex control systems required for final treatment in the steel industry is a period of about 42 months. Attached to our written testimony is an analysis by J&L's Engineering Department which demonstrates precisely what's involved in that 42-month period. I can assure you it's a realistic analysis of the schedule to achieve the exceedingly stringent requirements of the newly defined limitations. I believe that it would apply equally to other industries.

We agree with the Administration's position as stated in Senate Bill 2652, which was introduced by Senator Chafee, that the compliance date for final compliance should be extended to July 1, 1988. Hopefully, this would allow the steel industry time for recovery from the current recession, and for subsequent orderly capital formation, engineering, and construction. It would also allow the Agency time for publication of final guidance documents for other industries. Uniformity of compliance dates for publicly operated treatment works and for industrial compliance would be achieved as well. From the viewpoint of our industry, the number one concern with the Clean Water Act today is this deadline extension.

Another concern which we believe to be of significant importance to the nation, as well as to the steel industry, is with provisions in the Act which at times lead to treatment simply for the sake of treatment. The objective of the Federal Water Pollution Control Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. As a means of achieving this objective, the Act set up a series of technology-based requirements and dates for the attainment of those requirements. It was believed at that time that these were necessary interim steps toward the ultimate objective of the Act. Where they contribute toward that objective, clearly these are logical steps to be taken. However, it is now known that there are cases where the installation of facilities to meet these technology-based requirements will cause little or no improvement in the quality of the nation's waters. As an example of this, a group of five steel companies located along the Monongahela and Ohio Rivers engaged Environmental Research & Technology, Inc., to estimate the benefits to society of implementing proposed final standards for the steel industry. This extensive study covered nine blast furnace and coke oven installations. It calculated water quality changes, and the potential benefits to society from these changes. The conclusions of the study were clear. The report says, and I quote, "The water quality changes resulting from BAT were shown to be insignificant," unquote. The study concludes, and again I'm quoting, "There is no justification for requiring an expense of $55 million (company estimates) for the implementation of BAT at the facilities included in the study." A copy of the executive summary of this report is included with our written testimony. We would, of course, be happy to provide you with full copies of the report.

This report shows clearly one instance where the current requirements of the Act result in treatment for the sake of treatment. We do not believe that this is an isolated example. Therefore, we strongly recommend that the Act be modified to provide a waiver from technology-based requirements where the discharger or permittee can demonstrate that these requirements are not needed to achieve appropriate water quality standards in the receiving stream, or where installation of additional equipment to achieve these technology-based requirements will not have any measurable effects upon the quality of the receiving waters.

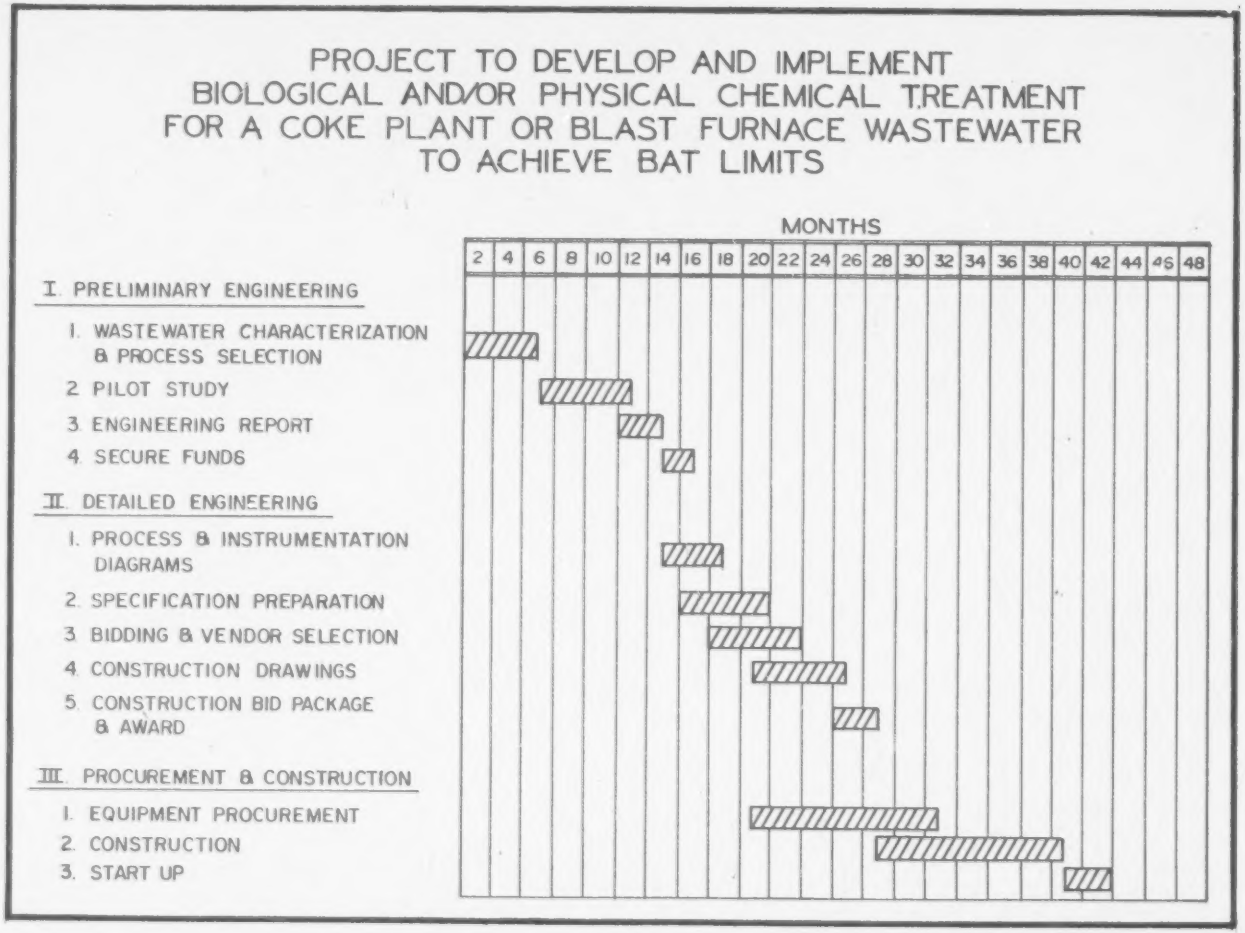
We believe that this concept, frequently referred to as a "BAT waiver," makes a great deal of sense. It maintains the presumption in the Act that the technology-based requirements are the general requirements applicable to all industries. But it allows a permittee faced with a large expenditure which will result in no useful water quality improvement to demonstrate the ineffectiveness of the controls and, thus, be excused from otherwise applicable requirements. The cost savings for these nine plants in the Pittsburgh area alone could be up to $55 million in capital cost and a continuing cost of about $16 million per year. This is money which could be used and is needed today for the modernization of our industry.

To conclude, Mr. Chairman, I'd like to reiterate that the steel industry is committed to support the environmental goals established by the Congress, and specifically the goals of the Clean Water Act. We have already invested a great deal toward achieving those goals, and we have come a long way toward them.

We believe the Clean Water Act should be amended as proposed in Senate Bill 2652. We also urge consideration for the avoidance of expenditures which will not improve the environment, if not in this Bill, then in future fine-tuning of the Clean Water Act.

That concludes my formal statement. I will be happy to answer any questions that you may have.

PROJECT TO DEVELOP AND IMPLEMENT BIOLOGICAL AND/OR PHYSICAL CHEMICAL TREATMENT FOR A COKE PLANT OR BLAST FURNACE WASTEWATER TO ACHIEVE BAT LIMITS


MONTHS
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48
I. PRELIMINARY ENGINEERING
1. WASTEWATER CHARACTERIZATION & PROCESS SELECTION
2. PILOT STUDY
3. ENGINEERING REPORT
4. SECURE FUNDS
II. DETAILED ENGINEERING
1. PROCESS & INSTRUMENTATION DIAGRAMS
2. SPECIFICATION PREPARATION
3. BIDDING & VENDOR SELECTION
4. CONSTRUCTION DRAWINGS
5. CONSTRUCTION BID PACKAGE & AWARD
III. PROCUREMENT & CONSTRUCTION
1. EQUIPMENT PROCUREMENT
2. CONSTRUCTION
3. START UP

PROJECT TO DEVELOP AND IMPLEMENT BIOLOGICAL AND/OR PHYSICAL-CHEMICAL TREATMENT FOR COKE PLANT OR BLAST FURNACE WASTEWATER TO ACHIEVE BAT LIMITS

I. PRELIMINARY ENGINEERING

1. Wastewater Characterization and Process Selection

- o develop project scope, solicit proposal, award consulting contract
- o conduct wastewater characterization and establish design basis in view of present and proposed production schedules
- o evaluate process alternates and perform treatability studies as necessary to establish most cost-effective approach

2. Pilot Study

- o conduct pilot studies to establish design criteria and demonstrate process feasibility in achieving BAT standards

3. Engineering Report

- o prepare process flow sheets, cost estimates and project design and construction schedules
- o prepare draft Preliminary Engineering Report
- o report review, correction and engineering management approval

4. Secure Funds

- o appropriation request preparation, Board approval and securing of funds

II. DETAILED ENGINEERING

1. Process and Instrumentation Diagrams

   o size equipment, prepare P&I Diagrams and equipment arrangement drawings.

2. Specification Preparation

   o vendor equipment review followed by writing of specifications

3. Bidding and Vendor Selection

   o solicit and review bids and select vendors

4. Construction Drawings

   o prepare construction drawings based on vendor information

5. Construction Bid Package and Award

   o prepare construction bid package, obtain bids and select contractor(s)

III. PROCUREMENT AND CONSTRUCTION

1. Equipment Procurement

   o order and receive equipment

2. Construction

   o construct facilities and install equipment

3. Start-Up

   o equipment check out and process start-up.

Statement of

Richard W. Kreutzen, Chevron U.S.A., Inc.

on behalf of the

American Petroleum Institute

INTRODUCTION

The American Petroleum Institute (API) appreciates this opportunity to present its views on needed legislative changes to the Clean Water Act. We believe that much has been achieved under the current Act. However, there are many provisions which cause unnecessary expenditures and delays while contributing little to enhancing the quality of the nation's waters. Some fine tuning of these provisions is necessary.

It is time to step back and view the accomplishments that industry has made to date in improving the quality of effluent discharges. It is appropriate to ask whether further controls are necessary in all cases. The petroleum industry has made a tremendous investment in terms of manpower, capital investment, and operating expenditures for water pollution control. This has produced significant results.

During the period 1967 to 1979, the refining industry reduced its discharge of conventional pollutants -- biochemical oxygen demand, suspended solids and oil and grease -- by 95, 91 and 96 percent respectively. The refinery wastewater treatment systems which produced these results have also been shown to achieve greater than 95 percent removal of the organic priority pollutants and significant removal of the elemental priority pollutants found in refinery wastewaters . In fact, studies conducted by the Environmental Protection Agency and the API reveal that relatively few (less than 15) of the listed

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organics and metals are found in significant quantities in refinery untreated wastewaters. The organic priority pollutants are generally removed to non-detectable levels in refinery effluents. The metals, namely chromium and zinc, are generally found at concentrations less than 200 parts per billion (ppb).

Operating experience in the Gulf of Mexico and other offshore areas has shown that controlled routine discharges from oil and gas exploration and production activities have not resulted in any significant adverse impact on the environment. This favorable environmental record has been used to support the issuance of general National Pollution Discharge Elimination System (NPDES) permits for offshore facilities. In fact, although large-scale drilling and production operations began in the area some 30 years ago, the fish catch in the Gulf has tripled. This increase supports the compatibility of petroleum operations with commercial and recreational fishing.

The petroleum industry is concerned that the Administration proposal for legislative amendments to the Clean Water Act (S.2652) does not address many of the issues which we believe need a comprehensive review and hearing before Congress. We are concerned that the five year reauthorization called for in S.2652 will provide a disincentive to obtaining needed amendments to the Act during the next five years. We urge Congress to consider all the issues prior to enacting any legislation. If time does not permit a comprehensive review of the Act this year, the API suggests that a one-year reauthorization and a one year extension of the July 1, 1984, compliance date for Best Available Technology and Best Conventional Technology be considered.

CLEAN WATER ACT ISSUES OF IMPORTANCE TO THE PETROLEUM INDUSTRY

In the following sections of our statement we will address issues of importance which API believes deserve a comprehensive review by Congress. These issues are:

- o Best Available Technology and Compliance Dates;
- o The NPDES Permit Program;
- o New Sources;
- o Pretreatment;
- o The Dredge and Fill Permit Program; and
- o Ocean Discharge Criteria.

Where these issues are addressed in part by S.2652 we have provided comments on the appropriate sections of that bill. Additionally, we have provided comments on two provisions of the bill -- Section 8. Administrative Civil Penalty Authority, and Section 9. Felony Sanctions -- which we believe to be particularly onerous and deserving of a full hearing and consideration by Congress.

I. Best Available Technology and Compliance Dates

Compliance dates are of significant concern to the petroleum industry. Section 2 of S.2652 provides for an extension of the industrial compliance deadlines for Best Available Technology (BAT) and Best Conventional Technology (BCT). However, S.2652 does not address industry concerns with BAT

technology requirements of the present Act. There is a critical need to allow greater flexibility in assessing BAT requirements in order to recognize the substantial achievements industry has made to date and to avoid "treatment for treatment's sake."

A. BAT/BCT Compliance Deadline Extension -- Under Section 301 of the Clean Water Act, effluent limitations requiring the application of BAT and BCT are to be achieved by all industrial dischargers not later than July 1, 1984. These effluent limitations are to be determined on the basis of either industry specific guidelines or case-by-case Best Professional Judgment (BPJ) applied by the permit writer. Once determined, BAT and BCT limitations are to be incorporated into National Pollutant Discharge Elimination System (NPDES) permits. Each NPDES permit is required to contain a compliance schedule specifying the timetable a permittee must follow to achieve the required effluent limitations. Regardless of when the limitations are determined and the permit issued, industry must presently achieve full compliance no later than July 1, 1984.

In order to comply with the July 1, 1984 deadline, industry must know what its BAT and BCT effluent limitations are to be well in advance so that any required technology can be designed, purchased and installed. A minimum of three years is usually necessary. BAT and BCT effluent guidelines for most major industries, however, will not even be promulgated until 1983 or later. In the absence of effluent guidelines, permit

writers must attempt the laborious and time consuming task of developing effluent limitations on a case-by-case basis. Considering the thousands of permits requiring action, the existing statutory schedule does not provide sufficient time to process, issue, and implement new BAT and BCT permits by July 1, 1984.

The Administration proposal would amend Section 301 of the Act to extend the deadline for compliance with BAT and BCT effluent guidelines to July 1, 1988. Compliance with permit limitations based on BPJ must be achieved three years from the date of issuance of the BPJ permit. Dischargers using innovative technology must achieve compliance by July 1, 1991.

API fully supports this proposal.

B. Clarifying BAT Requirements -- In addition to allowing an extension of the compliance deadline for BAT, there is a critical need to allow greater flexibility in assessing BAT requirements for toxic pollutants in order to recognize the substantial achievements industry has made to date and to avoid "treatment for treatment's sake." For many categories and classes of point sources, best practicable technology (BPT) has been found to provide substantial removal of those toxic pollutants present in raw wastewaters of industrial dischargers. Additionally, those few toxic pollutants found in BPT effluents are well below the levels for which further cost-effective treatment is known to be available. Yet, the Act's direction that BAT result in "reasonable further progress

toward the national goal of eliminating the discharge of all pollutants" could be misinterpreted as requiring the installation of controls more stringent than BPT in all cases, irrespective of cost effectiveness and the substantial advances recorded to date. Clearly, the development and installation of more stringent technology for industries where BPT adequately controls toxic pollutants is an unnecessary drain on limited time and resources and benefits neither the economy nor the environment.

Analytical data obtained by both EPA and industry on petroleum refineries indicate that only a limited number of toxic pollutants are present in refinery raw wastewaters. In fact, only 11 compounds were found having average concentrations greater than 100 parts-per-billion in the raw wastewaters during an extended study at two refineries in the New Orleans area.[1/] These named compounds were either not detected or were present at very low concentrations in the final effluents of the refineries. In most cases, greater than 95 percent removal of individual toxic pollutants was found in this and other studies.[2/]

These data clearly confirm the following statement given in the December 1980 report by the House Subcommittee on Oversight and Review of the Committee on Public Works and Transportation:

> "... it is now known that basic biological treatment technologies do in fact remove considerable quantities of the toxic (priority) and other pollutants, and in many instances either reduce or eliminate the threat of both acute and chronic toxicity to the aquatic environment" (emphasis added).

API believes that further modifications to the BAT requirements of the Clean Water Act should be considered. Specifically, API recommends that:

- o BAT technology be designated as equivalent to BPT for those industries where BPT technology adequately controls the discharge of toxic pollutants.
- o The incremental cost-effectiveness of any additional technology requirements should be considered in assessing the appropriateness of such technology for BAT.

C. Modification of BAT Requirements Based on Environmental Considerations -- In the 1977 amendments to the Act, Congress added Section 301(g) providing for waivers from BAT requirements for non-conventional pollutants (those pollutants not classified as conventional or toxic) based on economic and water quality considerations. Because of the lack of information and concern with toxic pollutants, however, Congress expressly prohibited in Section 301(l) the granting of BAT waivers for toxic pollutants. The appropriateness of this prohibition must be reevaluated.

Technology designated as BAT for some facilities will provide significantly more stringent control than is necessary to protect receiving waters. For example, a petroleum industry research facility is being required to meet a 10 ppb effluent limitation for two chlorinated hydrocarbons because granular activated carbon, which is unproven technology for such a facility, has been designated as BAT by the permitting agency. Yet, the EPA water quality criteria to protect human health and aquatic life for these compounds are orders of magnitude

greater than 10 ppb. The applicant is in the midst of challenging those unjustified limitations.

Additionally, work being carried out by EPA in the area of site-specific water quality criteria modification indicates that the toxicity of pollutants varies greatly depending both on the characteristics of the pollutant and the physical/chemical characteristics of the receiving water. That is, the concentration of a pollutant which will produce a toxic effect in the receiving water will vary from stream to stream and from pollutant to pollutant. Therefore, in order to avoid "treatment for treatment's sake," individual point sources should be eligible for a modification of BAT requirements where these requirements are set more stringent than BPT.

There should be several options available for such a modification. Where only a few toxic pollutants are present and water quality standards have been or can be established for these pollutants in the receiving water, a demonstration by the discharger that the effluent does not violate the standard(s) should suffice. Where a greater number of pollutants are present in what appears to be significant amounts, a determination that the effluent does not pose a receiving water toxicity problem should be sufficient to support case-by-case modification of BAT requirements.

API believes that the following modification to the Clean Water Act should be considered:

- A case-by-case modification of BAT effluent limitations for toxic pollutants should be allowed where a discharger can demonstrate that the effluent from his facility does not cause applicable water quality standards to be violated or adversely impact the receiving water based on its designated use. In no case should the modification allow treatment less stringent than BPT.

II. National Pollutant Discharge Elimination System (NPDES) Permits Program

Section 402 of the Clean Water Act (CWA) establishes the NPDES permit program. Under this program, all point source discharges of pollutants to navigable waters must have an NPDES permit. Because the permit program imposes an unnecessarily heavy burden in terms of time and resources on government and industry, some modification of the program requirements is necessary. Specifically, the petroleum industry is concerned with the lifetime of NPDES permits and the fact that insignificant discharges are included in the NPDES permit program. S.2652 addresses only the first concern.

A. NPDES Permit Term Extension -- Under Section 402 of the CWA, NPDES permits may be written for a period not to exceed five years. The proposed revision to Section 402 would extend this period up to ten years.

The existing five year maximum lifespan for NPDES permits imposes unnecessary burdens on industry, EPA and states alike. It may take as long as a year for a final permit to be issued. Additionally, up to three years may be required to install treatment technology necessary to comply with permit conditions. Under this scenario, the effectiveness of existing

permit conditions may not be ascertainable by the time the permit application and issuance process must be repeated since the permittee may have only one year of actual experience in the effectiveness of the particular technology.

Extending the lifetime of an NPDES permit would not adversely impact water quality. Section 122.9(e) of EPA's Consolidated Permit Regulations authorizes issuance of permits for durations less than the full allowable term. Moreover, Section 402(b)(1)(C) of the Act provides for the termination or modification of an extant NPDES permit for cause. Therefore, EPA and the states have adequate flexibility to issue fixed life permits of less than ten years duration and to reopen a permit which was issued for a full ten-year term if individual conditions warrant such treatment.

API supports the Administration's efforts to place the Clean Water Act on parity with other environmental statutes. Congress has not placed restrictions on the duration of permit terms under other environmental statutes such as the Resource Conservation and Recovery Act (RCRA) and the Clean Air Act.

B. Excluding Insignificant Discharges -- An additional burdensome problem with Section 402 is the application of permit requirements to environmentally insignificant point source discharges. Thousands of discharges, including many sources of storm water runoff, have little or no adverse impact on water quality yet are regulated under the NPDES permit program. This is both time consuming and costly and imposes an unreasonable

and unnecessary burden on both state and EPA permit issuing authorities and industry. Faced with the enormous task of renewing permits for major point source discharges, it is doubtful that permit issuing authorities will be able to act on most minor discharge permit applications during the next several years.

During the first round of NPDES permit issuances under the Federal Water Pollution Control Act of 1972, EPA attempted to exclude many storm water discharges containing insignificant quantities of pollutants from NPDES permit requirements. This exclusion was challenged by the National Resources Defense Counsil (NRDC) which claimed that EPA had no authority under the Act to exclude any point source discharges of pollutants.[3/] The court agreed with NRDC and as a result EPA now believes that it has little or no discretion in its application of the permit program.

Based on a survey of 39 states, the Association of State and Interstate Water Pollution Control Administrators in May 1979 reported that a total of 5,808 major and 36,090 minor NPDES discharge permits had been issued to both industrial and municipal dischargers.[4/] The report stated: "about 51 percent of all permits issued ... involved relatively insignificant facilities with respect to point source pollution concerns." In spite of EPA's efforts, there are still thousands of permit applications (some submitted as long ago as 1972) for

small sources that have not yet been acted upon and on which the permit issuing authorities have little interest in acting.

The resources of government and industry should be directed toward eliminating major sources of pollution to the nation's waters and should not be diluted by the necessity to include minor or insignificant discharges under the NPDES permit program. By reducing the NPDES permit requirement from almost universal coverage to a more realistic level, both industry and government will be able to better focus on the real problem areas affecting the environment.

API believes that the Clean Water Act needs further amendment in this area. Specifically:

- The EPA Administrator should be given specific authority to exempt environmentally insignificant discharges from the requirements of the NPDES permit program. This authority should be sufficiently flexible to allow both exclusion of appropriate discharges such as storm water run-off from a category or class of point sources as well as case-by-case exemptions. An expedited procedure should be established for case-by-case exemptions.

III. New Sources

Under Section 306 of the Act a facility is defined as a new source if its construction is begun after the proposal date of an applicable performance standard. Additionally, Section 511 of the Act requires that new source NPDES permits be subject to the requirements of the National Environmental Policy Act (NEPA). S.2652 appropriately modifies the definition of a new source, but does not address the requirement for new source NEPA review.

A. New Sources Definition -- A new source under the CWA is defined as any source the constructon of which was commenced after the proposal of a new source performance standard (NSPS). Although EPA is required by the CWA to promulgate final new source standards within 120 days of proposal, the Agency has found this time requirement impossible to meet. The proposed revision to Section 306 of the CWA contained in Section 5 of S.2652 would redefine a new source based on the date of promulgation of an applicable NSPS. This is a more rational approach and should be adopted. It is unfair to subject new industrial facilities to the uncertain requirements of new source performance standards which have not been finalized and which may not be finalized within a reasonable time period following proposal.

B. New Sources, NEPA Requirement -- Under Section 511 of the CWA, issuance of a NPDES permit for a new source is subject to the National Environmental Policy Act (NEPA) and can require the preparation of an Environmental Impact Statement (EIS). Although most EPA actions under the Clean Water Act are exempted from the EIS requirement of NEPA, the issuance of a new source NPDES permit is not included in this exemption. This imposes a time-consuming and costly burden on both EPA and industry. Additionally, it is inconsistent with other environmental statutes, since new source permitting under the Clean Air Act, the Safe Drinking Water Act and the Resource

Conservation and Recovery Act are specifically exempted from EIS requirements.

The purpose of the EIS requirement is to ensure that environmental considerations are confronted when a federal agency evaluates a proposed action. EPA, however, is the federal agency primarily responsible for protection of the environment. As such, environmental concerns play the major role in all of EPA's decision-making. Further, the NPDES permit issuance process for new sources provides an adequate forum for public consideration of and comment on any potential environmental consequences.

API believes that the Clean Water Act should be amended with respect to NEPA requirements. Specifically:

- Section 511(c)(1) should be amended to delete the words "and the issuance of a permit under Section 402 of this Act for the discharge of any pollutant by a new source as defined in Section 306 of this Act."

IV. Pretreatment

The Clean Water Act requires national pretreatment standards for facilities discharging into Publicly Owned Treatment Works (POTWs). This provision forces duplicative and environmentally inefficient control measures. Because the mix of wastes at different POTWs varies widely, each POTW experiences unique situations which are best addressed at the local level.

The CWA's pretreatment requirements would be amended by Section 7 of S.2652 to make the issuance of categorical pretreatment standards discretionary instead of mandatory while

continuing to require general pretreatment regulations applicable to all categories of sources. It would also provide for exemptions from both the general and categorical requirements where a POTW certifies that it has an adequate program to ensure that pollutants discharged by the POTW do not interfere with attainment and maintenance of designated uses.

However, the bill retains the concept that categorical pretreatment standards are appropriate and creates a presumption that every facility subject to a standard must comply unless an exemption is granted to the POTW. The exemption is to be based on a certification that it has an adequate program including "adequate" legal, financial, technical, analytical, administrative and enforcement authority to ensure compliance with effluent limitations. Depending upon how "adequate" is subsequently defined, the provisions of Section 7(b)(5)B of S.2652 could be so onerous that only the largest POTW's could afford to comply with the requirements and thus be eligible for an exemption. API believes that this approach does not provide sufficient flexibility for well-operated POTWs and may be so cumbersome as to be unworkable. Individual POTWs should be allowed to establish and enforce industrial pretreatment requirements on the basis of their unique situations and their NPDES permit. EPA should provide guidance and assistance as necessary for this effort.

V. Administrative Civil Penalty Authority

Section 8 of S.2652 would amend Section 309 of the Clean Water Act and empower the EPA to assess civil penalties of up to $10,000 per day for various violations. API opposes this provision as an unnecessary addition to the Act and as unjustified by EPA's enforcement experience to date.

Under the current structure of the Clean Water Act, EPA already has effective civil enforcement tools to ensure compliance with the Act. For example, if the Administrator finds a violation of either the Act or a NPDES permit, the Administrator is authorized: (1) to issue an Administrative Order requiring prompt compliance; or (2) to bring a civil action against the violator. In the event that litigation is selected, the Administrator may seek both injunctive relief and the awarding of civil penalties of up to $10,000 per day.

In addition to federal enforcement, state action is an integral element of the enforcement scheme. Indeed, 35 states have been delegated the power to take appropriate action to ensure compliance with the Act and permits issued thereunder. Thus, any consideration of whether a drastic change to the current civil penalty scheme is needed should consider also the necessary role that states play in this process.

We believe that existing enforcement tools are adequate to ensure compliance with the Act and that it therefore would be inappropriate to vest the Administrator with the broad-ranging penalty powers sought in this proposed legislation.

The vast majority of the regulated community complies with the Act. Despite the utilization of the best technology and the efforts of the most highly trained personnel, however, technical violations can and do occur. Moreover, since the Administrative Order mechanism has been successful in the great bulk of deviations from the Act's requirements, the availablility of administrative civil penalties would be an unnecessary adjunct to the Administrator's enforcement authority and discretion. If the purpose of this provision is to reach those few violators who, through a course of conduct fail to conform their actions to the requirements of the Act, adequate mechanisms currently exist to penalize such conduct (i.e., judicial civil penalties, injunctions, contempt sanctions and criminal enforcement). In short, API fails to perceive a demonstrable need for this type of provision.

If enacted, the proposed amendment would eliminate many of the protections that are inherent in requiring a court to impose civil penalties. In addition to the obvious protections of the trial process, there are less obvious, but no less significant, safeguards that exist as a consequence of multi-tiered review within both EPA and the Department of Justice before enforcement actions are initiated. The elimination or avoidance of these protections should be considered with the greatest care and circumspection.

In addition to the lack of demonstrable need for creating added civil penalty powers, the specific vehicle proposed for

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engrafting this type of scheme into law is replete with numerous objectionable aspects:

- The proposed amendment is silent on the scope of the administrative hearing. Will only the amount of the fine be considered at the hearing, to the exclusion of considering whether a violation has been established? Most importantly, will the alleged person in violation be able to assert defenses such as those beyond the control of a permittee (upset) or unavoidable temporary factors, such as maintenance (bypass)?

- It is unclear whether the "person in violation" will have a right to an administrative appeal before having to litigate the matter in court.

- The scope and standard of subsequent judicial review are not stated. Where administrative civil penalties of up to $75,000 can be assessed, de novo judicial review should be statutorily required.

- Nowhere is there a delineation of how the $75,000 maximum penalty limit is to be arrived at.

- Both administrative and judicial civil penalties could be imposed if the violation does not constitute a "discharge of pollutants."

- The Administrator simultaneously could pursue both administrative and judicial penalties for any violation, including "discharge" violations, because it is only after a person has administratively paid the assessed penalty (i.e., has been "penalized administratively") that judicial penalties under Section 309(d) would be prohibited.

In summary, API seriously questions whether there is a demonstrable need for the addition of administrative civil penalties to the Act. Moreover, the scheme proposed is too open-ended, subject to abuse, vague and ambiguous. Accordingly, API urges deletion of this provision from S.2652.

VI. Felony Sanctions

Section 9 of S.2652 would significantly alter the current criminal enforcement provisions of the Clean Water Act by expanding their scope, converting the existing misdemeanor provision into a felony and creating a completely new felony offense. In brief, it would:

- o Lessen the EPA burden of proof and increase the severity of punishment through the elimination of the existing misdemeanor provision for "willful" violations and through the insertion of a felony provision for mere "knowing" violations;
- o Expand the presently listed statutory provisions that, if violated, would be subject to criminal prosecution;
- o Add several provisions criminalizing the discharge of "any pollutant or hazardous substance" into sewer systems and POTWs; and
- o Transform "falsification" violations from a petty misdemeanor into a two year felony for the first offense and conviction and a four year felony for any subsequent prosecution.

API strongly opposes passage of these expansive revisions because we believe there to be no demonstrable need for such broad-ranging criminal provisions possessed of such far-reaching implications.

A. "Knowing" Violations as a Felony Offense -- The proposed change from "willful" to "knowing" violations is most inappropriate because it: (1) eliminates EPA's appropriate burden of proof to demonstrate an "intent to violate the law"; and (2) exacerbates the situation by elevating the criminal offense from a misdemeanor to a felony. Although "knowingly" is used in the Resource Conservation and Recovery Act, knowing

violations under RCRA are of active conduct (e.g., knowing transportation, knowing disposal). The very scheme of the Clean Water Act, however, is not so action specific (i.e., knowing violation of the Act or permit conditions). Thus, the nexus between the knowing act and resultant criminal liability is far less distinct under the Clean Water Act. Moreover, under RCRA knowing violations are misdemeanors, whereas knowing violations of the Clean Water Act would become felonies. In short, the current criminal enforcement provisions (i.e., "willful" misdemeanors) are in consonance with the realities of the legislative scheme under the Clean Water Act.

B. Broad Scope of Criminality -- This reduced standard of proof (negligent or knowing without requiring a specific intent to violate the law) is also troublesome because of the broad list of Clean Water Act violations that are subject to criminal sanction. The law and regulations are so complex that even an inadvertent failure to comply with an obscure or minor regulation might result in criminal indictment and possible jail sentence.

C. New Provisions Criminalizing Discharges to Sewers and POTW's -- It may be contended by some that the provisions which address discharges to sewers and POTWs would close a perceived gap in criminal enforcement between and among a multitude of environmental statutes. It should be noted, however, that the states also have criminal laws that may apply to these activities as well or better than the current proposal. Absent a

clear showing that existing state and federal criminal enforcement mechanisms are inadequate to achieve the avowed purpose of effectively punishing these offenders, Congress should refrain from creating a new federal felony offense.

These new criminal sanctions also may have an untoward consequence from a public policy perspective. By making certain discharges to sewers felony offenses, there may be a disincentive to comply with local notice requirements because a discharger runs the risk of prosecution even if no damage results from a discharge. Although API believes that such a callous failure to provide notice properly deserves severe punishment, such punishment may be of little solace to those who may suffer personal injury or property damage as a consequence.

The phrase "may reasonably be anticipated to cause" harm, in referring to discharges to sewers, is both speculative and subjective and, therefore, inappropriate. For example, under this formulation it might not be necessary for the government to show that the discharge would probably cause harm, only that it might possibly cause harm. Further, criminalizing conduct by reference to the probable awareness of an undefined reasonable man is necessarily subjective. Far more clarity and certainty should be required before enacting any new federal criminal regime such as this.

There is no statutory recognition for defenses predicated upon the acts of third parties or acts of God. For example, if

a POTW were to violate its permit terms because of its own mismanagement and, secondarily, because of the discharge of a pollutant into a sewer system, criminal liability to the discharger could attach. Moreover, since the proposal criminalizes the discharge of any "pollutant," even minor excursions by a discharger from its pH or BOD limit could result in criminal prosecution.

The proposed language that addresses discharges to sewers does not require that the violative discharge be in a sufficient quantity to cause harm. Rather, this language implies that if the substance, regardless of amount actually discharged, could cause harm, a criminal violation is committed. The amount of the substance discharged should be an essential element of the government's proof. In this regard, the government should be required to establish that the amount shown to have been discharged caused or would cause the requisite harm.

The expansive definition of "hazardous substance" in subsection (6) is of considerable concern. Included within this definition are a number of chemicals that are regulated under other environmental statutes for purposes totally unrelated to any hazard or interference they may pose to a sewer system or POTW. It is wholly inappropriate, therefore, to summarily include those chemicals within the ambit of criminality under Section 309.

Lastly, the proposed legislation is replete with numerous undefined and vague terms. For example, the term "sewer

system" is undefined and presumably could include discharges into conveyances that do not lead to POTWs as well as discharges into privately-owned treatment facilities.

D. Falsification as a Felony -- Under the current scheme of the Clean Water Act, the making of a knowingly false statement to the voluminous reporting requirements of the Act is punishable as a petty misdemeanor. This is substantially the same language and offense as is found in Section 113(c)(2) of the Clean Air Act. The proposed amendment would transform such violations into a two-year felony for the first conviction and a four-year felony for any subsequent prosecution. Absent a clear showing that existing penalties have been inadequate to ensure compliance with the reporting requirements of the Act, we believe there to be no basis for so radically increasing the penalties for this type of offense.

In sum, API believes that the current, stringent criminal provisions existing under state and federal law are adequate to handle any perceived problems in criminal enforcement. In this regard it may be more appropriate for EPA to defer to state and local enforcement of discharges to sewers, rather than to create a potentially conflicting program under the broad-ranging, far-reaching amendment currently under consideration.

VII. Dredge and Fill Permit Program

The Section 404 dredge and fill permit program is an issue of critical importance to the petroleum industry which is not addressed by S.2652. Specific concerns with Section 404 are:

- o The expansive assertion of federal control over a multitude of activities that occur in large areas of state and privately owned inland and coastal lands;
- o The ultimate authority given to EPA over a permit program which is administered by the U.S. Army Corps of Engineers; and
- o A lack of statutory balance which does not consider the energy and resource needs of the nation.

These factors have resulted in both unreasonable delays and unnecessary permit stipulations. Notwithstanding current efforts at regulatory reform, these concerns and problems will not be alleviated fully.

A. Overly Expansive Geographical Scope -- Under the combined provisions of Sections 301 and 404 of the Clean Water Act, a permit must be obtained from the Secretary of the Army (Corps of Engineers) for the "discharge of dredged or fill material" into "navigable waters." Section 502(7) of the Act, in turn, defines "navigable waters" as "the waters of the United States."

The Section 404 legislative history offers little to suggest that Congress intended its present broad application. Initially, the Corps construed the statutory scope of the program as extending only to waters which had traditionally been considered to be navigable under the Rivers and Harbors Act of 1899. However, in 1975, a federal district court in National Resources Defense Council v. Callaway ruled that the Corps had a far too restrictive view of its authority. The Court held that in enacting the Clean Water Act, Congress intended to

assert federal jurisdiction over the nation's waters to the "maximum extent permissible under the Commerce Clause of the Constitution."[5/]

The government did not appeal this decision. Instead, the Corps issued new regulations which, by means of their definitions, extended the Corps' jurisdiction to a lengthy list of waters; included were "navigable waters of the United States, including adjacent wetlands" and "all other waters of the United States ..., such as isolated wetlands and lakes, intermittent streams, prairie potholes, river bottoms and other waters ... the degradation or destruction of which could affect interstate commerce." 33 CFR Sect. 323.2(a).

In light of the foregoing, API considers it necessary for the Congress to redefine the geographical scope of the Corps' permitting program and to bring it more in line with the intent of the Clean Water Act. The coverage of Section 404 should then be focused more closely upon traditionally navigable waters.

Various drafting regimes could accomplish this result. One such approach is included in S.777. (A virtually identical bill was introduced in the House of Representatives, H.R.5766.) Under S.777 "navigable waters" would include traditionally navigable waters, waters that can be made navigable by reasonable improvement, and all waters subject to tidal influence. As an added wetlands protection, S.777 also would allow the states to add areas to Corps control by the simple

process of listing and defining them. As a consequence, concerns for the protection of essential wetlands would be maintained, while at the same time recognizing that wetlands' regulation impacts upon state prerogatives such as local land use planning. A balance, therefore, would be struck that also would have the practical effect of providing needed certainty to the proper scope of a meaningful and responsive Section 404 program.

B. Lack of Corps Control Over Its Permit Program -- Under the existing legislation, as interpreted by former Attorney General Benjamin Civiletti, EPA excercises final authority over the Corps' implementation of the Section 404 permit program.[6/] API believes that the agency charged with implementing the mandates of the Act should also be allowed to determine the limit and direction of its regulatory program.

C. Lack of Statutory Balance -- Permit decisions under Section 404 are based upon EPA promulgated guidelines. These guidelines are to be comparable to the criteria applicable to ocean discharges under Section 403(c). The Section 403(c) criteria, however, look to environmental values in the abstract and do not specifically recognize other important national interests such as energy, mineral and natural resource utilization needs.

D. Regulatory Reform -- The Administration has placed the 404 dredge and fill permit program high on its regulatory reform agenda. On May 7, 1982, the Office of Management and

Budget released a "charter" for regulatory reform to the Section 404 program administered by the Corps. Although API strongly endorses this effort, modification to the existing regulations alone cannot provide the relief which is urgently needed nor produce a regime which takes into account our national interests in a balanced manner. This is so for a number of reasons:

- The pervasive jurisdiction of the Corps is largely a function of the statute and the way it has been interpreted.
- The statute confers ultimate policy authority on EPA, an agency which has no responsibility for the actual operation of this permit program.
- Many areas subject to Corps' permitting may have only marginal environmental value relative to their enormous energy or other resource potential. The statute might be misconstrued by a court or misapplied by EPA as not allowing these other values to be reflected in permit decision-making.
- Absent clear legislative direction, any regulatory reform of the permit program may be subject to court challenge and subsequent administrative change.

Thus, while regulatory reform may provide some relief, amendment of Section 404 is absolutely essential if unnecessary regulation and litigation are to be avoided.

Section 404 should be amended to:

- Redefine the geographic scope of the permit program.
- Give ultimate power and authority under Section 404 to the Corps.
- Require the Corps to issue a dredge and fill permit unless a disposal site cannot be specified under the Act.
- Add the national interest as a disposal site criterion.

VIII. Ocean Discharge Criteria

S.2652 does not address the serious concerns of the petroleum industry with the criteria specified in Section 403 of the CWA which concerns ocean discharge criteria. Section 403 of the Clean Water Act requires permit writers to accumulate sufficient information under seven environmental impact categories to determine that unreasonable degradation will not result to ocean waters. This approach imposes an almost impossible requirement of sufficient information to satisfy an unworkable test. As a result, permit writers have required duplicative and unnecessary studies and reports prior to issuing permits for offshore oil and gas exploration and production activities. Further, permit writers have imposed totally unnecessary permit conditions to insulate themselves from the unreasonable wording of Section 403. Satisfying these requirements has resulted in delay and expense with no resultant benefit to the marine environment. Further, all this has occurred in the context of NPDES proceedings otherwise satisfying the requirements of the Clean Water Act.

Section 403 was originally inserted in the Federal Water Pollution Control Act of 1972 because of concern that the other provisions of the Act would not adequately protect ocean waters. After ten years of experience under the Act, it has become clear that the limitations and conditions imposed under NPDES permits adequately protect the marine environment. Through comprehensive bioassay and dispersion studies, the

petroleum industry has demonstrated that typical effluents from exploration and production operations are subject to rapid dispersion and do not adversely impact marine ecosystems.

Before a discharge can commence from offshore oil and gas operations there are several steps which must be undertaken. First, there must be a lease sale which is accompanied by an environmental analysis under state and federal law and the preparation of an environmental impact statement, if required. Next, an NPDES permit must be issued which includes appropriate effluent limitations and conditions under Sections 301, 302, 306, 307, 308 and 402 of the Act. Since these limitations and conditions provide more than ample protection for the marine environment, Section 403 adds nothing to the NPDES process for offshore oil and gas activities. Rather, Section 403 erects an additional, unnecessary procedural barrier to reasonable permit issuance.

API believes that Section 403 the Clean Water Act should be amended to address these problems. Specifically:

- o An NPDES permit should not be denied under Section 403 unless the Administrator determines that the discharge would cause unreasonable degradation of the marine environment.
- o Discharges in compliance with categorical effluent limitations guidelines to areas that are not of special biological concern shall be presumed to cause no unreasonable degradation of the marine environment.

Alternatively, to remedy the inequities inherent in applying Section 403 to offshore oil and gas activities, API recommends adoption of the following amendment:

- Offshore oil and gas activities to be conducted in a lease sale area for which an enviromental analysis has been conducted shall be excluded from the requirements of Section 403 upon condition that such dischargs there from will otherwise meet all applicable requirements under Sections 301, 302, 306, 307, 308 and 402 of the Clean Water Act.

CONCLUSION

While S.2652 addresses some industry concerns, there are significant problems in implementing the Clean Water Act which are not addressed. In addition, the provisions for administrative penalties and criminal sanctions are neither necessary nor justified. Changes to the Act can be made while maintaining the nation's commitment to improving water quality. API urges Congress to fully consider all areas of needed improvement in deliberating reauthorization of the Act.

References

1. API Publication 4346, "Refinery Wastewater Priority Pollutant Study -- Sample Analysis and Evaluation of Data," Dec. 1981.

2. API Publication 4296, "Analysis of Refinery Wastewaters for the EPA Priority Pollutants," Oct. 1981.

3. NRDC v. Train, 396 F.Supp 1393 (D.D.C. 1975), aff'd. NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

4. Association of State and Interstate Water Pollution Control Administrators, "Recommendation for an Improved National Water Qulaity Program," Washington, D.C., 1979.

5. 392 F.Supp. 685 (D.D.C. 1975).

6. 42 Op. Att'y. Gen. No. 15 at 6 (Sept. 5, 1979).

THE BAT-TOXICS PROGRAM UNDER THE CLEAN WATER ACT

J. Taylor Banks
Senior Attorney

The Clean Water Act's requirement that industrial sources utilize "best available technology" (BAT) is the centerpiece of Congress' strategy to curtail toxic pollutant discharges. The strategy was endorsed and adopted in the 1977 amendments after EPA and NRDC constructed it in the well-known "Flannery Decree," or toxics Consent Decree of 1976.

As lead counsel for NRDC in the Consent Decree litigation, came before you five years ago to explain why this approach made sense and should be endorsed by Congress. I return for the same purpose today, a bit wiser but no less enthusiastic or committed to the strategy. It is working, if not perfectly, at least far better than its critics predicted. More important, it can work even more effectively if Congress will stand behind it, push EPA to do a better, more expeditious job, and once again reject the invitation to stumble backward toward a water quality based approach to toxics regulation through variances.

Congress is being asked to make two significant changes in the BAT-toxics strategy. First, EPA has proposed to extend its deadline for issuing BAT regulations and the date for industry's compliance with those regulations. Second, industrial interests -- particularly chemical companies represented by the Chemical Manufacturer's Association (CMA) -- propose to add a BAT variance for individual dischargers, or at least to delete the Act's current prohibition against any variance from toxics limitations.

In the discussion below, I will address each of these proposals in some detail and explain why they are neither necessary nor advisable. Indeed, both run directly counter to Congress' long-standing emphasis on prompt, uniform, toxics controls.

At the outset, however, I hope the Committee will focus for a moment on two important points. First, we have a national toxics problem out there and BAT is needed to address it as expeditiously as possible. Second, BAT is not an inflexible, expensive, or enormous leap forward in toxics control; it is a rational fine-tuning of existing pollution standards.

I. BAT Is Needed to Address This Country's Toxic Water Pollution Problems.

In EPA's testimony yesterday before this Committee, Dr. Hernandez emphasized that the Act's 1977 industrial requirements based on "best practicable technology" (BPT) have accomplished a good deal of toxics cleanup. Assuming EPA's (or are they CMA's?) data are accurate, that claim may be true. If it is, we should applaud Congress' wisdom in selecting a technology-based system that has worked so well in the past -- well enough to "incidentally" remove pollutants that treatment systems were not even designed to address.

But that really begs the most important question: what is

still out there? How many tons of toxic chemicals are still discharged by American industry, and do those discharges pose serious environmental and health threats? The answer is: no one really knows for sure. EPA hasn't a clue where, or how severe our toxics problems really are.

As part of NRDC's litigation involving the toxics Consent Decree, we have pushed EPA for over six years to identify those waterways that are particularly contaminated by toxics (we call them hot spots), to then figure out which sources and pollutants are causing those problems, and finally to develop site-specific strategies to go as far as necessary to clean them up. Last year, after what we thought was real progress, EPA gave up. Administrator Gorsuch belittled all of the Agency's work to date, and the Agency issued disclaimers saying "we really don't know" what chemicals are out there.

So it really does not help very much when Dr. Hernandez stresses that BPT technologies remove large percentages of selected metals, as he did in yesterday's testimony. That is terrific, but so what?

Here is our examination of available data and information on what is still out there and why we are concerned about it.

A. <u>A Lot of Toxic Chemicals Are Still Discharged.</u>

According to the most recent EPA data we have, the raw waste streams of major American industries contain about 1.3 billion

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pounds of toxic chemicals per year[1]. That is approximately the amount of toxics that would be discharged to the environment without any treatment.

EPA says that currently only about 412 million pounds per year -- about a third of the "raw" total -- are discharged to waterways and public sewers. BPT-level technologies apparently have removed the other two-thirds -- not as great as Dr. Hernandez claims, but thankfully a large fraction. Still, the remaining amount works out to over a million pounds a day for the BAT toxics strategy to address.

After BAT is in place, EPA estimates that only about 128 million pounds per year will remain. Thus, the BAT strategy is expected to remove approximately 65 percent of the currently discharged toxics, or another bite of about two-thirds. The end result -- 128 million pounds -- is approximately one-tenth of the amount with which we started.

Is it worth removing those toxic chemicals? We think so. EPA may be unwilling to say publicly that toxics problems exist,

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[1] The data discussed in the text above are taken from Table 1-1, page 1-3 of a report titled "Assessments of the Impacts of Industrial Discharges on Publicly Owned Treatment Works." The report was prepared by JRB Associates, an EPA contractor assisting in the Agency's Regulatory Impact Analysis for the pretreatment program. JRB's experts have stated that they obtained these data directly from EPA's project officers in charge of preparing the BAT effluent guidelines for the primary industries. Moreover, Dr. Hernandez has personally verified these totals as the Agency's latest, most reliable information.

but the Agency's data and analyses suggest strongly that we had better move as promptly as possible to treat these chemicals.

B. There Is Evidence of Serious Toxic Water Quality Problems.

The conclusions to be drawn from data always depend on who is asked to draw them. As I mentioned earlier, EPA's policy staff has repeatedly contradicted fairly clear indications by technical personnel that there are toxic problems that should be addressed --problems that in some cases will remain even after BAT is implemented.

My discussion below summarizes data and analyses that also have not been approved by EPA's political appointees. Nevertheless, it was compiled by EPA personnel and obtained by NRDC recently from EPA files. The data suggest rather startling conclusions.

First, in a document dated June 5, 1981,[2] analysts under contract to EPA examined actual water quality data for 11 metals collected from 1975 to 1980 by the USGS stations around the country, and compared the values to EPA's 1980 water quality criteria. The results are disturbing:

* For a number of very toxic chemicals -- cadmium, copper, lead, -- over half of the samples exceeded EPA's

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[2] Grossman and Payne, "Summary of NASQAN Criteria Violation Analysis: The Effects of Changes in Water Quality Criteria and USGS Adjustments to the Data -- 1975-1980."

criteria. A fairly typical example is lead, for which 71% of the 1975-77 readings and 55% of the 1978-1980 readings exceeded the (24-hour aquatic life) criterion. The decline in recent years is not due to better treatment; it indicates that as sampling and anlytical techniques improve over time, more lower values can be added to the data.

* These readings typically exceeded EPA's criteria by wide margins. Those readings which exceeded the criterion for lead, for example, averaged 415 times the criterion value. For copper, the average was 57 times, and for zinc 23. These are not close enough to the "safe" levels to be explained away by sampling anomalies or problems with EPA's criteria.

Second, EPA staff have produced documents called "Executive Summaries" regarding the potential need for additional water quality standards convering selected metals and cyanide. These documents examine actual water quality data in EPA's STORET system, and compare those values to the Agency's national criteria. In addition, EPA staff calculated the effects of installing BPT and BAT technologies in industries known to be major contributors of these pollutants.

The pattern is similar to results of analyses using USGS

data:

* Levels of cyanide exceeded EPA's chronic water quality criterion in 31 percent of the readings. Looking just at receiving waters for Iron and Steel facilities, BPT would produce cyanide concentrations exceeding the criterion 64 percent of the time during average stream flows, and BAT would only drop that rate to 40 percent.[3]

* Lead exceeded the criterion 44 percent of the time. With BPT, receiving waters for Iron and Steel plants would exceed the criterion in 27 percent of the samples. With BAT, receiving waters for inorganics plants would exceed the criterion in 20 percent of the samples.

Similar results were obtained for copper and mercury. The reports tend to show: (a) there are problems out there, as indicated by actual, ambient data; and (b) BAT treatment will bring the majority of industrial sources down to discharge levels that probably will not cause problems in receiving waters.

None of these analyses is good enough to prove that

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[3] Given the dates on these reports (summer 1981), the analysts obviously were using the proposed version of the Iron and Steel BAT regulations. The final version published by EPA last month is considerably weaker.

particular toxics problems exist in specific locations. EPA cannot generate such proof, and that is precisely why Congress has chosen not to rely on regulatory strategies that require such proof. The studies do furnish evidence, however, that the BAT-level controls are needed. There do seem to be toxic water quality problems out there worth addressing with a national cleanup strategy.

II. BAT is a Flexible, Affordable Means of Fine Tuning Existing Treatment Requirements.

EPA is fond of saying that it hopes to use a rifle, not a blunderbuss, to attack toxic water pollution problems. That is what the BAT strategy represents -- a flexible and easily adjusted system that addresses known problems in an affordable fashion.

I am frankly tired of hearing industry and EPA talk about BAT as "regulatory overkill" or "treatment for the sake of treatment." It is not, and certainly EPA spokesmen know better than to offer Congress such myths. BAT is as precise a regulatory tool as can be devised in the absence of a better understanding of toxic water quality effects. By definition, it must be "reasonable" and "economically achievable." And it need only address those industries and chemicals believed to be worthy of national attention.

Here are the ways BAT can be adjusted. They include everything except an environmental variance (because we haven't the tools to utilize one) and an ecnomic variance (because it is inappropriate for toxics controls that are "affordable" to begin with).

A. EPA Need Not Regulate A Long List of Pollutants.

It simply is not true that EPA and industry have to concern themselves with 129 chemicals. EPA regulates only those that are found in a given waste stream in sufficient amounts, and with sufficient frequency, to warrant control. Moreover, EPA and NRDC recognized explicitly in the Flannery Decree that the Agency could drop from a specific industry regulation any chemical found only in trace amounts and not causing toxics problems. For this reason, EPA will address only a handful of pollutants in most regulations.

Moreover, Congress has furnished an appropriate avenue in S 307(a) of the Act to limit the reach of EPA's program. There, EPA is given the authority to remove chemicals from the statutory toxics list entirely -- for all industries -- and need only consider certain logical factors (how toxic is it, will it harm anything, etc.?). Once removed, a chemical would not have to be addressed by EPA in any regulation.

Several weeks ago, NRDC met with Mr. Eidsness and his staff regarding the Agency's program to determine whether widespread

toxics problems exist. We discussed, among other things, the S 307(a) toxics list, and Mr. Eidsness estimated that only about a dozen of the 65 chemicals are that list really deserve national attention. The remainder, EPA says, either are not as toxic as previously thought, or disappear from the aquatic environment in a short time (e.g., by volitalizing into the air).

NRDC stressed to EPA that it should use its de-listing authority to remove those chemicals. The Agency need only make a reasonble judgment and support it with enough facts and rational analyses to demonstrate that it followed Congress' directions for such decisions. We would be far better off without the myth that industry must control 129 chemicals.

EPA does not appear willing to back up its views in a manner that is reviewable in federal court. The Agency may turn to Congress and ask you to make the de-listing decision. We hope this Committee is prepared to ask the hard questions, examine the data and stand by its decisions in public. If it is not, you should urge EPA to pursue the administrative avenues Congress created in 1977, because EPA is not regulating all of those pollutants and should eliminate the appearance that it is.

B. EPA Need Not Regulate Every Segment of Every Industry.

Similarly, EPA is free to drop from its regulatory program whole industries or segments of industries that are not deemed a problem warranting national regulations. The Agency has done so

on numerous occasions when there are too few sources or too little toxic discharges to merit EPA's attention. The Assistant Administrator merely prepares an affidavit stating his reasons, and submits it to public notice and comment. As a result, what remains of EPA's program are those industries that truly deserve the regulatory attention they are receiving.

C. The BAT Concept Itself is Extremely Flexible.

BAT is the second of two steps toward reducing industrial discharges. BPT was suppowsed to bring all plants in an industry up to the level of the average performer. Most facilities are at this "average" baseline today. BAT is a fine tuning of BPT. It is supposed to bring all facilities up to the level of the best performer in the category. If Plant A can afford to do it, then Plants B and C -- assuming they are physically and economically similar facilities -- should be able to do it as well.

In taking that second step, however, the picture can vary radically from industry to industry. That is primarily because Congress decided that in defining the "best" performer, EPA need only require "reasonable" further progress beyond BPT. In some industries, no progress beyond BPT is reasonable because there is no discernable gap between the average and best performers that would be cost-effective to bridge. BPT and BAT simply are the same. EPA intends to promuglate regulations setting BAT equal to BPT for all but 8-10 of the primary industry categories.

In those 8-10 industry sectors, considerable progress can and should be made because some plants are doing much better than the remainder of the industry. In requiring some progress, EPA rewards the plants that have adopted advanced systems by forcing their competitors to do likewise. This encourages technological innovations and, more importantly, reduces pollution throughout the industry. But EPA can only insist on reasonable progress, and in determining what is reasonable, will examine both costs and effluent reductions.

Moreover, BAT does not, as industry sometimes asserts, mandate the rigid application of a particular technology. EPA cannot force a plant to install any particular type of treatment system. BAT regulations set effluent limits, in terms of allowable concentrations and pounds of pollutants in the discharge, and leave it to each plant to meet those numbers in the least costly fashion. EPA must base its numbers on what is achievable by a given technology (the "best available" one), but industry need not use that treatment system.

Furthermore, BAT must be "economically achievable" for the industrial category. In a depressed industry, EPA must take poor economic conditions into account. If that industry cannt "afford" a given treatment system, EPA cannot designate it as BAT.

Finally, there already is a variance from BAT effluent

limitations. EPA has created a variance called the FDF (Fundamentally Different Factors) variance. It is available to any facility that is so different from the others in its category that applying BAT to it would be unfair and inappropriate. For example, if a company cannot conceivably obtain enough land on which to build the treatment system EPA has designated as BAT, it may be eligible for lower BAT limits designed specifically for its facility. Anomalies and inequities are thus smoothed out in this fashion.

BAT just is not the monster it is sometimes made out to be. The flexibility, safety valves and inherent Agency discretion embodied in these concepts make BAT an excellent regulatory mechanism. In fact, EPA's planned implementation of BAT conforms quite well to this flexibility; as discussed below, the Agency simply is not over-regulating anyone.

III. EPA's Proposed Deadline Extensions Are Unnecessary and Harmful To The BAT-Toxics Program.

We have stressed repeatedly that EPA does not need until 1984 to promulgate BAT regulations, and that industrial sources do not need until 1988 to comply with those requirements.[4] Both

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[4] See "Analysis of EPA's Proposed Amendments to the Clean Water Act," dtd. April 8, 1982 at 23-26 (submitted for the record of these hearings).

extensions are unnecessarily long. The existing statutory deadlines (1980 for EPA and 1984 for industry) obviously must be modified, but EPA has been overly generous to both parties.

A. The EPA Promulgation Deadline.

As Dr. Hernandez and Mr. Eidsness explained yesterday, EPA has told Judge Flannery that BAT regulations can and will be promulgated far in advance of the suggested 1984 deadline. The current schedule offered by EPA ranges from now until March 1984 for the so-called "Phase I" primary industries.[5] Nine regulations will be finished this year, eight in 1983, and only two will be delayed into early 1984.[6]

EPA has sworn that it does not need more time and, as Mr. Eidsness tesetified yesterday, has marshalled its resources to keep that promise. Why, then, does EPA request such an extension? Dr. Hernandez put his finger on it yesterday when, in answer to the Chairman's question, he said he would prefer to

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[5] In yesterday's testimony EPA and industry witnesses repeatedly referred to promuglation dates in June 1984, and characterized their requested extension as an adjustment of only a few days. These industry segments are "Phase II" categories -- those EPA had hoped to drop altogether because it had not begun the work. Judge Flannery said "no," and consequently the Agency had to devise new schedules for these categories that naturally are much later than the Phase I schedules.

[6] We should note that this schedule has been requested by EPA, not approved by the court. The court told EPA to act even faster, and NRDC nas urged the court to stick by its order until EPA shows it cannot meet those requirements. We expect a ruling shortly.

have Congress tell him what to do rather than the Court. Senator Mitchell correctly observed that a new date from Congress would be just the excuse EPA needs to take from the court its power to enforce these schedules. Having failed to convince the court of any need for more time, EPA could use Congress as its tool for delay.

We urge you to reject this proposal outright. EPA has made a commitment, and should be required to keep it. As discussed below, the delays EPA is proposing will harm the environment. They will cause millions of excess pounds of toxics to be discharged every year. That harm is not necessary, as EPA's sworn statement to the court surely demonstrates.

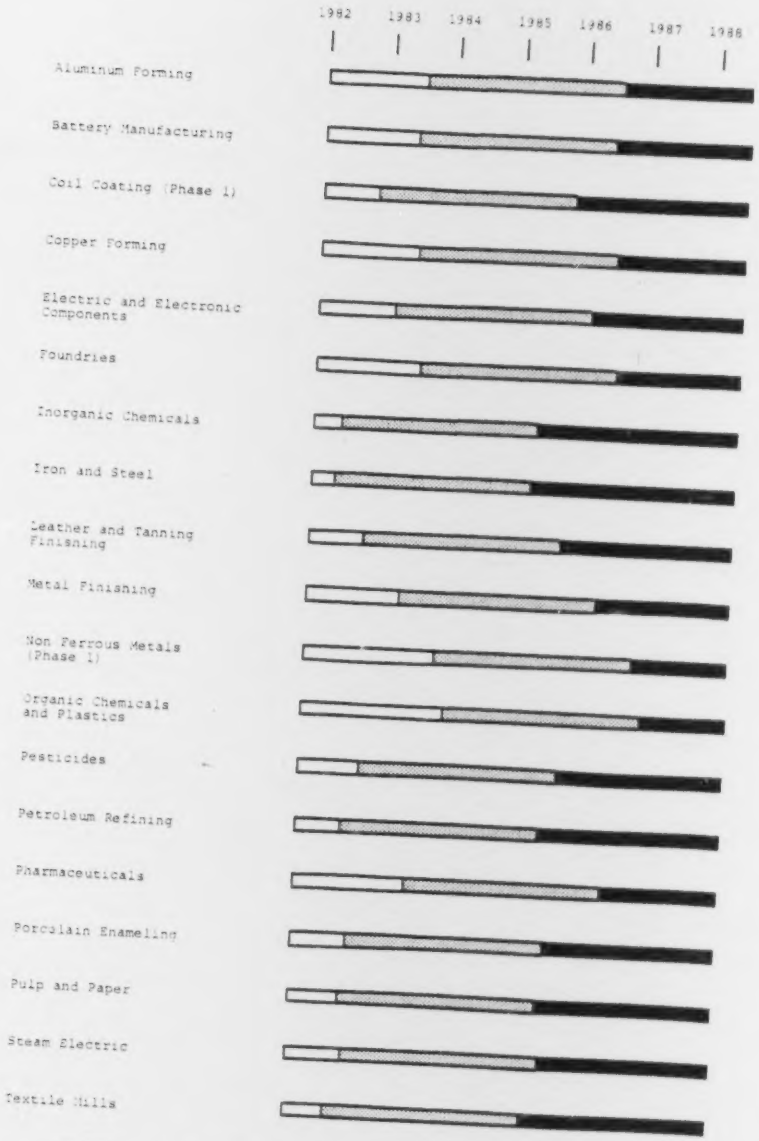
B. The 1984 BAT Compliance Deadline.

EPA's proposed extension of the 1984 statutory deadline to 1988 is not necessary. The proposal:

* gives sources in the Phase I primary industries an average of 2.35 years longer than they need to comply.
* grants some industries up to six years to meet their obligations.
* allows over 170 million pounds of excess toxic pollutantso be discharged to the environment.

The chart on the following page illustrates these points. The first segment of each time line stretches from the present to EPA's promised promulgation dates.[7] The second segment (shaded)

THE ENVIRONMENTAL PRICETAG OF EPA's 1988 BAT PROPOSAL



represents 36 months beyond the date each regulation is issued. As Dr. Hernandez and Mr. Eidsnesss testified yesterday (and others have noted on many occasions), industry commonly needs about 3 years to comply after it knows what its BAT requirements will be. The final (dark) segment shows the amount of time remaining before EPA's proposed 1988 deadline.

These final segments are approximately two and one-third years on the average. They represent the amount of time given away by EPA's proposal.

Using EPA data, we have calculated the amount of excess toxics discharged (the difference between current discharges and those expected after BAT) over the give-away period for each industry. These amounts appear on the right of each time line. The total for all Phase I primary industries is over 170,000,000 excess pounds.

That is the environmental price tag on EPA's proposed give away. It is far too high.

We urge the Committee to adopt an alternative formulation for adjusting the 1984 deadline. It will save those 170,000,000 pounds of toxics because it pegs each industry's compliance deadline to the date of promulgation. It will treat each industry fairly because the maximum length of all compliance

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[7] These dates are the ones EPA has sworn it can meet. We note, once again, that the court may require EPA to act even faster.

periods will be the same. And we think it will smooth out EPA's permitting and enforcement burdens by spreading industrial compliance over a several-year period.

Our proposal has three elements:

1. Adopt the deadlines by which EPA is required, under federal court order, to promulgate the BAT regulations for each primary industry. These dates will range from the present to March 1984 for Phase 3 I industries, and be slightly later for Phase II industries.

2. Require sources in those primary industries to comply with their BAT requirements as expeditiously as possible, but no later than three years from the date BAT regulations are promulgated (as now required for pretreatment standards). Mr. Eidsness testified yesterday that EPA is requiring Iron and Steel plants to comply as soon as "physically possible," and that these permit compliance periods range from two to three years. We simply propose that this practice be adopted into the law.

3. For all secondary industries (those without BAT regulations, require: (a) that EPA or the states issue permits containing any necessary BAT-toxics limits, determined case-by-case, no later than July 1, 1984; and (b) that such dischargers meet those limits as

expeditiously as possible but no later than three years after the permit is issued.

This is a very important point. You might not have noticed it, but EPA's proposal eliminates EPA's obligation to utilize the long standing concept of establishing BAT limits case-by-case using a permit writer's "Best Professional Judgment." These BPJ permits are essential for thousands of permittees in industries that will never have BAT regulations. EPA must be required to issue BPJ/BAT permits to these sources, for even though not considered important enough nationally for a regulation, some members of each category do have significant toxics discharges.

We think this is an equitable proposal that is far better for the environment and the statute than EPA's suggest5ed 1988 deadline. WE ALSO BELIEVE THIS IS THE ONLY AMENDMENT THE CLEAN WATER ACT NEEDS.

IV. The BAT Variance Is A Bad Policy That Would Simply Give the Chemical Industry an Unwarranted Loophole

Toxics variances are not needed and will not work. Congress rejected them in 1977 (SS 301(l) and 301(g)), and should reject them now. The notion of a variance is advanced primarily by CMA because such a provision would aid only the chemical industry.

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It is a CHEMICAL INDUSTRY FIX, and should be recognized as such. That is by far our dirtiest industry. Chemical companies should not be given variances.

For starters, I think we should all be clear about why EPA has not proposed a BAT variance. The Agency's transmittal letter (dtd. May 25, 1982 from Administrator Gorsuch) and testimony yesterday assert that EPA merely lacks the data to provide a detailed justification because it does not yet know how stringent the BAT rules are likely to be. Hogwash. EPA knows full well which industries it will regulate and approximately how much each one will have to spend for BAT controls (as discussed below).

The real reasons are: (1) political -- key leaders in the Senate and House have told EPA they will not pursue a bill containing such a provision; and (2) practical -- EPA not only thinks a variance would be difficult to implement, but believes it would be unnecessary given the weak BAT regulations it plans to issue (except for the chemical industry). We agree with EPA's practical reasons, and are grateful to this Committee for its political ones.

This issue (whether to include BAT variances in EPA's bill) was presented to the President for decision in May. Secretary of the Interior Watt, as head of the Cabinet Council on Natural Resources and Environment, recommended against the proposal, "recognizing that if a future case can be made for a waiver

during Congressional debate, the Administration will not oppose it ...." Mr. Watt concluded that "if no waiver provision results from Congressional action, EPA should conduct a systematic cost/benefit analysis over the next three years to establish a basis for seeking a waiver or for eliminating the requirement altogether in the future."[8] (emphasis added). Obviously, the President decided against proposing the BAT variance.

What's more interesting, and I think important, is EPA's rationale that convinced the Cabinet Council and Mr. Watt to make this recommendation. The Agency's case -- presented some time during April in an undated, untitled, unsigned memorandum -- states precisely our reasons for opposing a variance. I include the EPA document here for the Committee's information. In brief, it makes the following essential points:

A. EPA is Giving Industry All The Relief It Needs With Weak BAT Regulations.

The Agency knows now that only 8-10 out of 22 Phase I industries will have BAT regulations that are more stringent than BPT. Everyone else has ZERO COSTS FOR BAT. EPA also knows that the total price tag for these rules is only $80.6 million per year. Thus, even those industries required to make further

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[8] As an ancillary matter, we suggest that the Committee inquire as to whether EPA is using Clean Water Act appropriations for the express purpose of eliminating the Act's principal regulatory vehicle to control industrial sources.

progress beyond BPT will have minimum costs. The steel industry, for example, will have to spend 0.07 percent of the value of its annual sales to meet its BAT obligations. In EPA's words, "the strategy ensures economic achievability and cost effectiveness."

B. Only the Organic Chemicals Industry Would Save Significantly With a BAT Variance.

EPA estimates that compliance costs for organic chemicals producers will be from 4 to 8 times higher than the total for all other industries. That figure is perfectly consistent with the chemical industry's share of the pollutants discharged (112 million pounds of organic toxics annually compared to 130 million industry-wide).

C. The Deadline-Extension Proposal Already Provides Relief.

Industry certainly will save substantial sums on interest alone by being permitted to defer expenditures for BAT. The EPA stretchout proposal -- which we urge you to reject, as discussed above -- would be an unwarranted break. But any extension will ease the pressures of BAT costs.

D. BAT Variances Will Not Work.

EPA says the "technical tools required by this proposal are not yet developed and would be very expensive to implement." That understates the case a bit. The Agency's head of R&D

predicted last year that the scientific tools to decide BAT variances (water quality criteria and similar benchmarks for toxics) will take a decade to develop.[9]

E. BAT Variances Would Be Inordinately Expensive and Time Consuming.

Because any "environmental modification" requires detailed scientific scrutiny and extensive administrative processes, they tend to be very expensive and take a long time to complete. EPA estimates the government's personnel costs at 1200 work years per year just to process these variances, and predicts compliance for some industries in the 1990's. Similar experiences have been demonstrated under the existing S301(h) waiver for ocean outfalls.[10] EPA concludes that "the net societal gain ... may be negative."

Why should Congress start down such a lengthy, complex and costly road when the relief being afforded really is not necessary? We can't think of a single reason -- unless you intend to write legislative loopholes for the chemical industry.

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[9] Our "Analysis of EPA Proposals To Amend the Clean Water Act" discusses the details of these problems.

[10] Fewer than 20 waivers decision have been made in over five years because the process is complex and because regulations and litigation took a very long time.

BAT

BACKGROUND

- The emphasis on toxic pollutants in the 1977 Clean Water Act reflected widespread concern that there were a large number of toxic chemicals being discharged to the water environment causing significant effects on human health and aquatic life. To some extent these concerns were based on a lack of information, and, to be on the safe side, Congress directed EPA to develop BAT guidelines for controlling the 65 chemicals and classes of chemicals in 21 major industrial categories.

TARGETING BAT

- The Agency has shifted its BAT strategy so that BAT guidelines that are more stringent than BPT are being developed for only a relatively small number of industries which discharge significant amounts of toxic pollutants. For example, the Iron and Steel industry will discharge 2,560,000 pounds of toxic pollutants per year if BAT controls are not implemented and at least twice that much will be discharged from the organics and plastics industry without BAT controls.

- For those industries and pollutants which are being targeted by the Agency for BAT guidelines more stringent than BPT, the Agency will ensure that the BAT limitations will be (1) economically achievable, (2) cost effective, and (3) necessary to reduce significant discharges of one or more toxic pollutants to remain if only BPT is implemented.

  Environmental impact assessments conducted by the Agency of proposed effluent guidelines indicated that this approach will result in significant water quality benefits. For instance, returning to the Iron and Steel example, our analysis of the major dischargers in this industry shows that about 75 percent of them will, by themselves, cause violations of applicable State water quality standards in the absence of BAT.

- The Agency now projects that eight industries will receive BAT guidelines more stringent than BPT. They are:

  The Agency is still in the preliminary stages of analysis for another three industries for which BAT may be required:

  The regulations' annual cost for the first set of industries is $80.6 million. Preliminary estimates of annual costs for the second set of industries and between $400-$700 million and that number is dominated by the costs to the organics and plastics industry ($325-$650 million).

BAT MODIFICATIONS OR EXEMPTIONS

Environmental exemptions from BAT limitations have been proposed to ensure cost-effective targeting of pollution control and avoid treatment for treatment's sake.

NECESSITY

The Agency's present strategy minimizes the need for this:

(a) Agency BAT strategy already limits number of industries subject to BAT more stringent than BPT.

(b) Within this limited group the strategy ensures economic achieveability and cost effectiveness.

(c) Proposed extensions of BAT compliance deadlines gives this group additional time to develop and implement the most cost-effective means of compliance.

FEASIBILITY

- Exemptions/modifications are inherently subject to scientific debate. Due process requirements must be met, public hearings must be held, which result in time delays and extensive resource burdens for industry and government. In some cases these administrative proceedings will result in final permit limitations not being met until the early 1990s.

- The net societal gain in developing a modification/exemption system may be negative. The technical and administrative costs of a modification/exemption system for the public and private sectors is large. Public sector costs (States and EPA) will amount to approximately 1200 workyears in Fiscal Years 1984-85, one-third of which will be borne by the Federal government.

- Given the careful targeting of controls, few industries will qualify. This does not mean, however, that few will apply for modifications/exemptions. Processing all applications will take a significant amount of time and resources, whereas only a subset of plants can expect to benefit from the process.

- Industry proposal entails additional technical problems. The technical tools required by this proposal are not yet developed and would be very expensive to implement. Few States have adopted water quality standards for toxic pollutants, and such standards cannot be developed quickly because of the need to adapt EPA lab-derived criteria to local conditions. A single toxic pollutant wasteload allocation is estimated to cost from $50,000 - $1,000,000, depending on the number of dischargers involved.

CONCLUSION

EPA believes that the addition of a BAT modification/exemption provision to the proposed bill is not needed or presently feasible, is highly controversial, and would therefore reduce the prospects for enactment of any reforms to the CWA this year. Without this provision, EPA believes that it can muster the necessary support for the bill's passage. Morever, EPA can continue to study the necessity and feasibility of such a provision for possible future use.

COMMENTS SUBMITTED BY

THE BUSINESS ROUNDTABLE

The amendments to the Clean Water Act drafted by the Administration and included in S. 2652 provide expanded enforcement authority to the United States Environmental Protection Agency ("U.S. EPA"). With regard to criminal penalties, the amendments completely supplant the existing criminal penalty provisions of Section 309 (c). As to civil penalties, while retaining the provisions of Sections 309 (b) and (d) with regard to judicially imposed civil penalties, the amendments include a totally new provision allowing for the administrative imposition of civil penalties.

Criminal Penalties

Section 309 (c) presently provides for the imposition of criminal penalties--a fine of $2,500 to $25,000 per day of violation and/or imprisonment for not more than one year--for willful or negligent violations of Sections 301, 302, 306, 307, or 308, or any condition or limitation contained in a permit issued under Section 402, or in any permit issued by a State under Section 404. The proposed amendments provide for two major substantive changes to the present Section 309 (c). First, instead of willful or negligent violations, the amendments provide for criminal penalties in cases of negligent or knowing violations, with the latter being subject to felony sanctions of a fine of $50,000 per day of violation and/or imprisonment for up to two years. Second, the amendments provide for the imposition of criminal penalties for the introduction of "any pollutant or hazardous substance" into a sewer system or publicly owned treatment works which causes or may reaonably be

anticipated to cause personal injury or property damage or causes the treatment works to violate any condition or effluent limitation in a permit issued to the treatment works under Section 402.

1. "Knowing" Violations

There is little argument that a law such as the Clean Water Act should not contain any provision for criminal sanctions. However, care must be taken to assure that while the imposition of criminal penalties is an available sanction in appropriate cases, they should not be available for imposition on such a wide-spread basis that the distinction between criminal and non-criminal conduct becomes muted.

The Congress has recognized in the Clean Water Act, and other environmental laws, that there should be varying degrees of penalties dependent upon the conduct involved. Although the law presently identifies willful or negligent conduct as being a basis for the imposition of criminal penalties, U.S. EPA has stated that there is no provision to deal with knowing violations and, thus, seeks to have the law amended to identify negligent or knowing conduct as the basis for criminal penalties. In seeking this amendment, U.S. EPA has ignored the argument that knowledge is one of the elements of a willful violation. See Intercounty Construction Co. v. Occupational Safety and Health Review Commission, 522 F.2d 777 (4th Cir. 1975) ("Willful" act under OSHA defined, inter alia, as one taken with knowledge). While both "willfully" and "knowingly" have been defined as involving an intentional act, "willfully" also involves a disregard for the

legality of the act. See id.; Irey v. Occupational Safety and Health Review Commission, 519 F. 2d 1200 (3d Civ. 1974); United States v. Hauley Chevrolet, Inc., 371 F. Supp 381 (M. D. Fla. 1974); American Timber & Trading Co. v. First National Bank of Oregon, 334 F. Supp. 888 (D. Oregon 1971). What U.S. EPA appears to be requesting is that the Congress lessen the standard of conduct for imposing criminal sanctions while, at the same time, increasing the severity of the sanctions which may be imposed for such conduct. The Administration does not appear to be arguing that its enforcement activities have been hampered as a result of the present language of the law. The Administration has not given any cogent reason for the amendment, merely expressing a desire for expanded criminal enforcement authority. Even less explained is the Administration's reasons for elevating a "knowing" violation to the felony level.

The change to a "knowing" violation is of great concern to industry. Water pollution control is not yet at the point where compliance is guaranteed 100 percent of the time. Industry should not be confronted with the fear of criminal liability for each violation of a permit or the law. The Administration has stated that the purpose of the amendment is to address long-term, intentional violations which result in significant harm to public health or the environment, rather than isolated instances of permit limitation exceedances. However, the language of the amendment makes no such distinction and clearly conveys the impression that such isolated instances may result in the imposition of criminal penalties. In addition, U.S. EPA's desire to change to the

"knowing" violation standard for criminal liability presents a confusing signal to industry. U.S. EPA has recently proposed to delete a provision of its present regultions which requires a permittee to halt or reduce its production or discharges in order to maintain compliance with permit limitations. 40 C.F.R §122.60 (b); 47 Federal Register 25546, June 14, 1982. In proposing the deletion, U.S. EPA noted that this "duty to halt or reduce" requirement was particularly troublesome to the utilities industry, who, under the laws of some states, are required to provide a continuous, reliable supply of electric power. In addition to the utilities industry, other industries expressed to U.S. EPA problems they would encounter in complying with the "duty to halt or reduce" requirement. While the proposed deletion does not authorize "knowing" violations, it does recognize that there may be situations where industry, having discovered a violation, must continue to operate in a violating condition until compliance can be attained. Such continued violations would be "knowing" and subject to the criminal liability provisions of the amendments.

The Administration has indicated as support for seeking a "knowing" violation standard of criminal liability with felony sanctions under the Clean Water Act that a similar standard of criminal liability and sanctions exists under Subtitle C of the Resource Conservation and Recovery Act (Solid Waste Management Act) ("RCRA") concerning hazardous wastes. However, the criminal penalty provisions under Section 3008 (d) of RCRA are substantially more narrow than the proposed amendments to Section 309 (c) of the Clean Water Act. Specifically, Sections 3008 (d) (1) and (2) provide for

imposition of a fine of $50,000 per day of violation and/or imprisonment for up to two years for the following offenses:

(1) knowingly transporting a hazardous waste to a facility which has not been issued a permit;

(2) knowingly treating, storing, or disposing of a hazardous waste without having obtained a permit; and,

(3) knowingly treating, storing, or disposing of a hazardous waste in knowing violation of any material condition or requirement of a permit.

A comparison of these provisions of Section 3008 (d) with the proposed amendment to Section 309 (c) readily demonstrates that the conduct which may give rise to criminal liability under the former is set forth with much more specificity than in the latter. Unlike the general "knowing" violation language of the proposed amendment to Section 309 (c), the language of Section 3008 (d) specifically defines the conduct which may result in felony sanctions.

2. Introduction into a Sewer System or POTW

The Administration also proposes to amend Section 309 (c) by specifying a new violation for negligently or knowingly introducing into a sewer system or publicly owned treatment works ("POTW") any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage or causes the treatment works to violate any effluent limitation or condition in its permit issued under Section 402. Some have suggested that the purpose of this amendment is to provide enforcement authority against persons who surreptitiously discharge

or release substances into POTW's. However, the Administration's proposal is overly broad and unnecessarily vague. The amendment does not specify any definition of a "sewer system" or "POTW". While "POTW" is probably included with the present definition of "treatment works" in Section 212 (2) of the Clean Water Act, there is no definition in the Act for "sewer system." Does it include both public and private sewer systems? Would it include a plant's internal piping system? The amendment uses a definition of "hazardous substances" similar to that in the Comprehensive Environmental Response, Compensation, and Liability Act. However, "pollutant" is not defined in the amendment, although Section 502 (2) presently contains an all-encompassing definition. Under this existing definition of "pollutant," a material which had no toxic or hazardous properties could still be a basis for criminal liability. POTW's generally handle a combination of municipal waste water and waste waters from multiple industrial users. Under the amendment, any user whose discharge exceeded an applicable requirement could be held criminally liable even though the individual user's discharge, by itself, might not be sufficient to cause personal injury or property damage or cause a violation of the POTW's permit. In the case of a large POTW, it would not be unusual for more than one user to have an exceedance for a given pollutant or substance at a given time; does criminal liability attach to all users with an exceedance if the combination of their discharges causes the personal injury, property damage, or permit violation? Further, criminal liability attaches not only for discharges or releases which cause personal injury or property damage, but also those which "may reasonably be

anticipated to cause" such injury or damage. This standard is so vague as to deny a person of notice as to type of conduct which is prohibited. The amendment does not distinguish between the introduction of a pollutant or hazardous substance in a quantity sufficient to cause personal injury or property damage and the introduction of a pollutant or hazardous substance which, if it had been introduced in a large enough quantity, would have caused personal injury or property damage.

The amendment does provide for an affirmative defense if the discharge or introduction into the sewer system or POTW was in compliance with all applicable federal, state, and local requirements. However, the availability and utility of this affirmative defense is questionable. If the pollutant or hazardous substance is not the subject of a specific, numeric requirement, can the discharge or release be determined to be "in compliance"? Further, in view of the general subjective standards of the federal "General Pretreatment Regulations" (40 C.F.R. Pt. 403, 46 Federal Register 9404, January 28, 1981) and its state and local counterparts, all of which are presumed to be with the universe of applicable requirements, it is questionable whether any discharge or release which causes personal injury, property damage, or a permit violation could be considered to be "in compliance." Thus, for all practical purposes, the affirmative defense is a nullity.

Finally, the Administration has not presented any arguments as to the need for the proposed amendment concerning the introduction of pollutants and hazardous substances into sewer systems and POTW's. It would appear that U.S. EPA has sufficient

authority under the existing Section 309 (c) to seek criminal liability for violations of its General Pretreatment Standards when a pollutant or hazardous substance is introduced which causes personal injury, property damage, or violation of a POTW's permit.

Civil Penalties

In addition to the changes to the criminal penalty provision of Section 309, the Adminstration also seeks to amend Section 309 by adding a new subsection empowering U.S. EPA to administratively assess and collect civil penalties for violations of Sections 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation contained in a permit issued under Section 402 or in a permit issued by a State under Section 404. In assessing a penalty, up to $10,000 per day of violation but not in excess of $75,000., U.S. EPA must provide notice and an opportunity for a hearing, but such hearing is not subject to the requirements of Sections 554 or 556 of the Administrative Procedures Act. If a hearing is requested, the person against whom the penalty has been assessed may seek review of the assessment in a United States district court.

The authority of a federal agency to administratively impose civil penalties is not unknown under federal law. Although U.S. EPA does not have any administrative penalty authority under the Clean Water Act, the U.S. Coast Guard has authority, under Section 311 (b) (6) (A), to administratively impose a penalty of up to $5,000 for discharges of oil or hazardous substances in violation of Section 311. Under Section 120 of the Clean Air Act, U.S. EPA is authorized to assess and collect a penalty based upon the economic value of

delayed compliance beyond July 1, 1979. Under Section 16 of the Toxic Substances Control Act, U.S. EPA may assess a civil penalty of up to $25,000 for each violation of Section 15 of the Act, but must provide a hearing in accordance with Section 554 of the Administrative Procedures Act.

Under the amendment, U.S. EPA would have unbridled authority to administratively assess a penalty for any violation, regardless of how minor or technical in nature. Although the amendment provides for notice and an opportunity for a hearing, the requirements of the Administrative Procedures Act are expressly declared to be inapplicable. The amendment invests U.S. EPA with broad subpoena powers but makes no provision for the rights of the person against whom the penalty is being assessed in regard to the hearing or to obtaining discovery against U.S. EPA.

The amendment provides only limited protection from the imposition of multiple penalties for the same violation. The assessment of an administrative penalty in no way precludes the imposition of criminal penalties for the same violation. The imposition of civil penalties by a court for the same violation is only precluded to the extent that the violation involves a "discharge of pollutants."

The Administration appears to be proceeding on the theory that every violation of the Clean Water Act or a permit issued thereunder should be the subject of a penalty action. Section 309 (b), authorizing U.S. EPA to initiate a civil action to impose a civil penalty, requires U.S. EPA to exercise discretion and judgment in seeking penalties for violations. The amendment would eliminate

this need for exercising discretion and judgment, providing U.S. EPA with a ready and speedy mechanism for unilaterally imposing a penalty for even the most inconsequential violation. This is particularly troubling with a law such as the Clean Water Act which, because of its nature, gives rise to alleged violations which are technical in nature. Further, effluent limitations established under the Act are known not to be achievable 100 percent of the time and, thus, unavoidable violations will occur and are even expected. Finally, determination of compliance with requirements under the Act generally relies on self-monitoring reports submitted by the permittees. With the amendment, permittees must give pause knowing that a report they submit showing any deviation will provide U.S. EPA with the basis for administratively assessing a penalty.

Conclusion

The Administration has made no showing of need for expanding the penalty provisions of Section 309 of the Clean Water Act. There have been no arguments that the existing law unduly restricts U.S. EPA in enforcing compliance or that the amendments will result in a greater level of compliance. The amendments appear to be based upon a conclusion by the Administration that a ready mechanism should be available to impose penalties for every violation of the Clean Water Act and that as many violations as possible should be subject to potential criminal penalties. Section 309, as it presently exists, provides sufficient authority to enforce compliance with the requirements of the Clean Water Act and to seek the imposition of severe penalties for violations thereof where appropriate. If the Administration believes that there are situations which fall outside the scope of the present provisions of Section 309, they should develop specific language to cover those situations rather than pursuing the broadside approach contained in the amendments.

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TESTIMONY OF

CURTIS A. BARTON
MANAGER, ENVIRONMENTAL SERVICES
STONE CONTAINER CORPORATION

ON BEHALF OF THE

AMERICAN PAPER INSTITUTE
and the
NATIONAL FOREST PRODUCTS ASSOCIATION

I. INTRODUCTION

Good afternoon. I would like to thank Chairman Chafee and the members of this Subcommittee for allowing me to testify this afternoon on behalf of the American Paper Institute and the National Forest Products Association (API/NFPA) with respect to Amendments to the Clean Water Act (CWA).

My name is Curt Barton. I am the Manager of Environmental Services for Stone Container Corporation in Franklin, Ohio. I also serve as Vice Chairman of the API/NFPA Water Quality Committee. API/NFPA are national trade associations representing over 2,000 member companies who own and manage forest lands and manufacture pulp, paper and solid wood products. API/NFPA members have a direct interest in the effective implementation of the Clean Water Act.

Since 1972, I have been personally involved in the implementation of the Clean Water Act through my employers' support for its objectives. As part of that effort, I have also been an active member of several API/NFPA water committees and task forces.

II. FOREST INDUSTRY SUPPORT FOR THE CLEAN WATER ACT, AND THE ADMINISTRATION'S PROPOSED AMENDMENTS (S. 2652)

API/NFPA's concern with the country's water resources predates the 1972 Federal Water Pollution Control Act. API/NFPA support the Act, as modified by the 1977 amendments. The 1977 record demonstrates that we were one of the industry leaders in proposing reasonable and constructive changes to the Act. As it is being implemented today, the Act in many ways reflects the mid-course corrections we recommended, and this Subcommittee adopted, in 1977. These corrections were not intended to modify or delay any of the basic objectives of the Act, but to make it more effective.

Clearly, the most far-reaching and important 1977 amendments to the Act were those which distinguish between the treatment requirements for toxic and conventional pollutants. In 1977, Congress recognized the need to address the problem of toxic pollutants while, at the same time, selectively reducing excessive regulation of conventional pollutants. Congress determined that the costs of additional treatment should not be excessive in light of the effluent reduction benefits to be achieved. Thus, Congress created the concept of BCT -- best conventional technology.

Well over a year ago, API/NFPA began an intensive review of the Clean Water Act in order to determine what changes if any, were necessary to improve the effectiveness of the Act. We looked, in particular, for additional opportunities to apply the guiding 1977 philosophy of "avoiding treatment for treatment's sake."

After concluding our review, we believe that the Act can be more effectively focused in two ways: (1) eliminating costly and unnecessary requirements which do nothing to improve water quality; and (2) concentrating the decision-making process at the most efficient level of government to deal with a particular program -- often the state or local agency.

The Amendments recommended by API/NFPA are few in number and modest in their impact. They constitute a further refinement of the Act.

Similarly, the Administration has concluded that only a limited number of changes are warranted. We concur with this assessment. With limited reservations, API/NFPA support the Administration's proposal. We also support the decision to continue using technology-based limitations as the basic foundation of the Act.

Keeping in mind our goals of reducing costs and delegating responsibility to the most effective level of government, I will address the pretreatment program. This subject is one of the major

issues of concern to API/NFPA. However, there are a number of other Clean Water Act programs which affect our members. I request permission to submit materials on these subjects for the record.

III. THE PRETREATMENT PROGRAM -- OUR EXPERIENCE TO DATE

The forest industry supports the general concept of pretreatment of certain industrial wastes, as envisioned in Section 307(b) in the 1972 Federal Water Pollution Control Act. We recognize the need for pretreatment of industrial pollutants that: (1) are not susceptible to treatment in publicly-owned treatment works (POTW); or (2) would interfere with the operation of such a municipal system. Consequently, we did not object to EPA's 1973 regulations which implemented, for the first time, the so-called general pretreatment program.

In 1977, Congress amended Section 307(b) to provide POTWs with the opportunity to offer "removal credits" to their industrial clients. These credits would apply to any toxic, industrial pollutants which the POTW could effectively treat. Industries gaining removal credits from their POTWs would not be required to pretreat for the specified pollutants. EPA was charged with the responsibility of developing regulations to implement the removal credits provision.

API/NFPA supported the removal credits approach in 1977. In our view, this provision was designed to serve as a continuing incentive for local industrial participation in POTW systems. In addition, the removal credits approach was designed to assure that the removal levels which justified the local credits would be maintained by the POTW through the operation of a sound operation and maintenance program, as well as an effective pretreatment program. Thus, the removal credits approach was designed to result in better POTW operation as well.

The removal credits program, as envisioned by Congress in 1977, was complex but seemed workable. The removal credits were to serve as an incentive to both industry and the local community to encourage cost-effective, regional treatment.

Unfortunately, after EPA repromulgated the general pretreatment regulations in June 1978, it became obvious that their understanding of the law was considerably different from ours. The regulations for removal credits were so complex and burdensome as to be unworkable. The EPA failed to consult with the POTWs or to take into account the basic needs of local agencies in framing these regulations.

In addition, EPA encouraged, (or even required) local POTWs to force long-term industrial customers to install pretreatment for fully compatible pollutants such as Biochemical Oxygen Demand (BOD). This policy disregarded the stated objective of the Act to encourage joint treatment of compatible wastes, and is of great concern to our industry.

Litigation, followed by settlement negotiations, appeared to have solved the worst of these problems. However, EPA failed to effectively implement all of the negotiated settlement with respect to compatible pollutants in the January 28, 1981 general pretreatment regulations. In addition, discussions with EPA appear to have convinced municipal treatment authorities such as Los Angeles and Chicago that it would be futile for them to implement the removal credits system even under the new scheme.

In summary, API/NFPA have two major concerns with the current pretreatment program: (1) it is not clear that EPA does not intend to force the POTW to require pretreatment of compatible pollutants; and (2) the toxics regulatory scheme requires redundant treatment, and does not have the support of the local agencies.

The Administration's proposed Amendments have adequately addressed the latter concern. Thus, I would like to first concentrate on the former concern dealing with the control of compatible pollutants.

IV. REDUNDANT TREATMENT OF COMPATIBLE POLLUTANTS MUST BE AVOIDED

In general, API/NFPA members that discharge into POTWs do not discharge priority pollutants. Most industry effluents are characterized by the presence of conventional pollutants such as BOD

or total suspended solids. These pollutants are similar in many respects to domestic wastes, and are compatible with POTW treatment capabilities. Thus, EPA's policy regarding POTW acceptance of compatible pollutants is of critical concern to API/NFPA.

API/NFPA and others are concerned that contrary to the purpose of the pretreatment requirements of the Act -- which were not intended to require unnecessary or "redundant" treatment of compatible wastes -- EPA continues to encourage or require pretreatment of these conventional wastes.

The House/Senate Conference Report accompanying the 1972 Act clearly stated that:

> "Pretreatment of biological waste that is compatible with the treatment provided by a publicly owned waste treatment plant into which such waste is introduced may not be necessary... In no event is it intended that pretreatment facilities be required for compatible wastes as a substitute for adequate municipal waste treatment works." (Leg. History; 1972 FWPCA; Vol 1; Page 313).

In our view, Congress was correct in encouraging the joint treatment of similar municipal and industrial wastes wherever possible, as most cost-effective approach to regional treatment needs. In some cases there is also a technical benefit to this approach. Many industrial wastes, although highly treatable and biodegradable in

biological systems, lack nutrients such as nitrogen and phosphorus compounds. Domestic wastes have an excess of these compounds. Therefore, the most efficient way to treat both categories of wastes is by mixing them in a central treatment facility.

However, EPA's practice since 1978 has been to encourage cities with inadequate or poorly operated POTWs to require pretreatment of conventional pollutants in order to force some of their customers to pretreat rather than to correct the problems in their facility. API/NFPA recognize that, in some instances (for example, large volume, seasonal discharges), it may be less costly to require pretreatment than to increase the size of a POTW. In addition, large, intermittent discharges of compatible pollutants, and some slug loads may be disruptive to some POTWs and may require some form of pretreatment. However, this determination is best left to individual communities, based on local circumstances. This is clearly a local issue -- not a matter that should be prejudiced by an EPA policy.

As indicated, this and a number of other concerns led to a legal challenge by API/NFPA, as well as environmental and other industrial groups. As a result of this litigation, and a subsequent settlement agreement, EPA proposed further changes to the general pretreatment regulations in October, 1979.

At the time of the 1979 settlement agreement EPA agreed to include a "comment" in the regulations concerning the issue of compatible wastes:

> "This provision is not intended to require pretreatment for compatible wastes as a substitute for adequate municipal treatment. When difficulties arrive in meeting NPDES permit conditions, it is the responsibility of the POTW to come into compliance with its permit. The POTW should consider a solution that is cost effective and equitable and consistent with the goal of joint treatment."

As you may note, this comment is very similar to the language quoted earlier from the 1972 Act's Conference Report. Thus, it did not introduce a new or radical concept to the program. However, in the January 28, 1981 revised final regulations, EPA removed, without reasonable explanation, the above comment from the body of the regulation, and simply noted in the preamble that it had been removed.

API/NFPA recognize that many communities may wish to establish some additional form of regulation or control of the industrial compatible pollutants coming into the POTW. We have no objection to this. However, we also believe that local communities must have sufficient flexibility, based on local needs, conditions, and treatment facilities to make these types of decisions. They should be neither encouraged nor required by the Federal Government to do so.

We recommend, therefore, that language be included in any pretreatment amendment adopted by the Subcommittee to make it clear that Congress does not intend EPA to require redundant treatment of compatible pollutants. We would be pleased to work with the Subcommittee to further develop this approach.

V. PRIORITY POLLUTANTS -- A MORE EFFICIENT APPROACH IS NEEDED

As indicated above, priority pollutants are not a major issue for our industry. However, we do have some potential concerns in this area. Moreover, we believe that EPA cannot implement a workable pretreatment program until there is a more effective, appropriate means of addressing controls for toxic pollutants. The complexity and rigidity of the current pretreatment program will only produce more delays in implementing any pretreatment program for toxic pollutants.

EPA acknowledges that, in the effort to develop a national program, the Agency unnecessarily confounded what was a relatively clear Congressional intent. As a result, after ten years of effort, there is still no national pretreatment program, other than the general pretreatment requirements. Dr. Hernandez, in his testimony yesterday, very effectively summarized the Agency's concerns with the program, as well as the Administration's recommendations for change.

Other reviewers of the pretreatment program have come to similar conclusions. The House Public Works and Transportation Committee's Oversight and Review Subcommittee concluded in December 1980 that: "the [pretreatment] requirements are unworkable ... and certain to lead to costs totally out of proportion to any environmental benefits derived."

The current statute mandates the development of a national system of standards which will require those communities which have been operating effective programs for some time to modify their programs for the purposes of conformity. Many communities with locally derived pretreatment requirements have structured their programs by setting limits on individual toxic pollutants, such as zinc or copper. The Federal program, however, is based on regulating discharges by industrial categories. Under the Federal program, neighboring industries could very likely have differing limits for the same pollutant. This incongrous result might produce a type of national conformity, but it would cause impossible political and administrative problems for the local communities to implement. In addition, the Federal program clearly ignores the differences in treatment needs from city to city.

The program as envisioned by the Congress in 1977 with the removal credits seemed workable. However, now that the POTWs are convinced that it is futile to apply for these removal credits, it clearly cannot become effective. More to the point, it is time to

allow those POTWs that have developed (or have the capacity to develop) effective pretreatment programs for priority pollutants, the flexibility to operate their own program.

EPA is presently circulating a draft revision to the removal credit program which would establish a "national" removal credit system. The draft represents a simplified version of the earlier provision, but whether it will solve the problem is dubious. The EPA proposal falls short, in our view, of providing the POTWs with the flexibility to administer a pretreatment program that is specific to local POTW needs. API/NFPA continue to believe that legislative action will be necessary to properly address the issues of: (1) diversity of POTW operations; (2) the variety of toxic discharges from industrial and other sources; and (3) the need for the local community to have sufficient flexibility to operate an effective program.

In S.2652, the Administration recommends the retention of categorical standards for certain industries in communities only when the POTW is not capable of dealing with the problems caused by priority pollutants. For this approach to work, however, EPA must reasonably review and grant POTW exemptions -- both now and in the future. Further, we endorse the Association of Metropolitan Sewerage Agencies (AMSA) recommendations or similar approaches to simplify the POTW exemption process contained in the Administration's proposal. We believe that AMSA's views should be afforded substantial weight because they represent many of the communities that must make the proposed program work.

The main argument against granting these exemptions will be that localities are incapable of running an effective pretreatment program. This conclusion is simply not supported by the record.

Admittedly, the pretreatment program, like many other environmental programs, has undergone initial start-up delays due to a variety of factors, including limited resources and lack of operator experience. However, local agencies are now more than adequate to the task of assuring effective joint waste treatment. Thus, the record supports the EPA proposal for legislative reform to provide the POTWs with more program flexibility.

An EPA consultant to the program, JRB, Inc., has identified three critical elements essential to run an effective pretreatment program. They are: (1) the existence of a sewer use ordinance with specific effluent limits; (2) some form of permitting mechanism; and (3) a monitoring and enforcement program. Twenty-five percent of the POTWs likely to need a pretreatment program already have these fundamental program elements. Moreover, within the last three years, 64% of the POTWs have conducted an industrial waste survey leading toward program development.

One out of ten municipalities currently operates (or has applied for approval to operate) a local pretreatment program. Work toward program development has begun at 1,147 POTWs. This represents 57% of all municipalities that are required to develop pretreatment programs.

Finally, roughly two-thirds of eligible states have developed, or are close to developing, the capabilities necessary to control indirect dischargers in their state. In contrast to this progress by the states and municipalities, the Federal Government has issued and amended categorical pretreatment standards for only four of the 34 required industries.

VI. CONCLUSION

There has been considerable discussion, given the state of our nation's economy and the many pressing matters before the Congress, as to whether there is time to consider the Administration's recommended changes to the Clean Water Act this year. On behalf of API/NFPA, I urge this Subcommittee to make the time to consider this important legislation.

Specifically, API/NFPA believe the Administration pretreatment proposals are reasonable. There are sufficient safeguards in the proposed program to insure adequate control of toxic pollutants. We support giving the Administrator sufficient authority to set mandatory standards for those industrial categories causing the greatest environmental problems. Further, we would urge the addition of appropriate statutory language making it clear that the Act does not encourage the redundant treatment of compatible pollutants.

More generally, the Administration's bill will go a long way toward eliminating the delays and complexities in the federal water pollution control program. The Congress will reaffirm its support for this vital federal program, by taking steps such as: (1) endorsing a multiple-year reauthorization of the Act, (2) extending the BAT/BCT compliance dates; and (3) simplifying the pretreatment program.

Industry and local communities can and want to do the job of cleaning up our nation's waters. However, they can do so only if complexities, delays, and unnecessary expenditures are reduced.

Mr. Chairman, I would like again to thank this Subcommittee for the opportunity to testify. I will be happy to answer any questions you may have.

API/NFPA ADDITIONAL MATERIAL FOR THE RECORD

Several areas in which implementation of the Act can be improved can be addressed by regulatory action -- without requiring amendments to the Act. For example, we are encouraged by the initiatives taken by EPA to improve the process and the scientific basis for establishing water quality criteria and standards. We also support EPA and Corps of Engineers initiatives to revise the Section 404 permit process.

We recommend deferring legislative action in these areas until the Agency has had an opportunity to address the issues within the regulatory framework of the present Act. It is too early to state whether or not any legislative changes in these areas are needed.

However, S. 2652 identifies some issues which deserve legislative action now. There is no reason to delay action on these issues, or others that may be raised in these hearings until the above issues are ripe for legislative change.

I will first address those portions of the Administration bill which identify changes in the Act which API/NFPA support. In some cases, API/NFPA recommend slightly different approaches to problems than provided in S. 2652. I will then address those issues on which we differ. Finally, I will touch upon some problem areas not included in the Bill.

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API/NFPA SUPPORT THE ADMINISTRATION'S PROPOSED AMENDMENTS IN S. 2652

The Administration's proposals set forth in S. 2652 have similarly concluded that only a limited number of changes are warranted. With a few limited reservations, API/NFPA support the Administration's proposal. We also support the Administration's decision that uniform national technology-based limitations have proved an effective regulatory tool when reasonably applied. They should continue to form the basic foundation of the Act's National Pollutant Discharge Elimination System (NPDES) program.

During the Administration's review of issues that warrant legislative alteration, EPA has identified many (although not all) of the areas of concern to API/NFPA. Specifically, both API/NFPA and the Administration recommend legislative changes to: (1) simplify the pretreatment program; (2) extend the BAT/BCT compliance deadlines; and (3) increase flexibility in administering the NPDES permit program (including extending the life of NPDES permits up to ten years). We also highlight, below, additional areas of concern to API/NFPA members.

BAT/BCT INDUSTRIAL COMPLIANCE DEADLINE EXTENSION

Section 2 of S. 2652 would amend Section 301 of the 1977 Act to extend until July 1, 1988 the current deadline for industrial compliance with Best Available Technology (BAT) and Best Conventional Technology (BCT) effluent guidelines. In addition, the Administration's proposal would extend compliance deadlines for industrial permit limitations based on Best Professional Judgment (BPJ), to three years from the date of permit issuance. Finally,

the Administration's proposal also continues the present three-year deadline extension for dischargers using innovative technologies to achieve compliance with BAT.[1]

The proposal to extend the deadline compliance dates is a realistic response which takes into account the delays experienced by EPA in promulgating BAT/BCT effluent guidelines. Simply stated, industry will have insufficient time to meet the present compliance deadline (July 1, 1984) based upon EPA's published time schedule for promulgating the BAT/BCT effluent guidelines.

The Administration's proposal will provide industry with sufficient lead time to construct the necessary treatment facilities to come into compliance with BCT and BAT effluent guidelines once they are issued. API/NFPA support the proposition that an industry should be granted the necessary three years from the date of promulgation to install necessary technology. API/NFPA urge the Subcommittee to adopt a deadline extension.

EFFECTIVE ADMINISTRATION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The National Pollutant Discharge Elimination System (NPDES) -- perhaps more than any other Clean Water Act program -- has been complicated by judical numerous, and often conflicting,

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[1] A useful technical amendment that S. 2652 does not address would be to apply the Section 301(k) innovative technology deadline extensions to BCT technology -- as well as to BAT. Currently, because of the chronological order in which the 1977 amendments were drafted, the innovative technology deadline does not apply to BCT. Thus, dischargers who intend to install one innovative technology to meet both BCT and BAT limitations could be dissuaded by the lack of availability of a compliance extension for the BCT limitations. Because this disparity between BAT and BCT was inadvertant in the drafting of the 1977 Act, we would not anticipate any opposition to a technical amendment to rectify this problem.

administrative reforms, rulemaking, and judicial action. We hope that current regulatory reform efforts will reduce the complexity involved in obtaining an NPDES permit for an industrial facility. Under current procedures, it may take up to three years to negotiate a five-year NPDES permit.

Because of the ongoing regulatory reform effort at EPA with respect to this program, needed legislative changes are difficult to isolate. However, we support three changes which would be clearly useful in making the permit program more efficient. In our view, the impact of these changes on the NPDES program is minimal. They would still assure necessary environmental protection.

First, the term of an NPDES permit should be extended up to ten years. This proposal is reflected in Section 12 of the Administration's bill. For EPA and the state agencies assigned the responsibility of issuing NPDES permits, extending the length of the permit would allow the staggering of permit renewals and, thus, reduce the annual permitting workload. This change would also prevent large permit backlogs from accumulating in the future.

In addition, on industry's side, the ten year permit would recognize that pollution control investments are expensive, and that once made, the discharger requires a reasonable certainty that his investment will have a useful life before he is required to make a new one. Permits can always be reopened to provide additional control of toxic pollutants if the need arises.

Second, the federal statute should expressly provide that NPDES permits issued under authority delegated by EPA shall remain in force during all administrative and legal procedures attendant to

renewal. Under the Administrative Procedures Act, EPA-issued NPDES permits enjoy this protection while permittees negotiate their renewal. However, one-third of the state agencies that have been delegated NPDES permit authority do not have similar provisions in their state programs. Appendix C of our testimony is an EPA list of those states which do not have such a provision. As a consequence, upon expiration of an existing permit, the permittee in such a state faces an untenable choice of: (1) bearing the risk of operating without an approved permit; or (2) shutting down the facility until the negotiations for permit renewal are completed.

API/NFPA recommend that the Clean Water Act require NPDES-delegated states have an authority similar to that under EPA regulations providing for the extension of NPDES permits during the procedures attendant to permit renewal.

Finally, the time has come to step back and take a look at the proper role that EPA should play in the day-to-day administration and oversight of state-administered NPDES programs. We believe that the NPDES program has reached a sufficient level of maturity at the state level so that EPA review and approval of state-issued NPDES permits are no longer necessary.

Rather, for states that have effectively administered the NPDES program for more than three years, EPA's responsibility should become one of periodic program audit rather than the review and approval of either all or selected state-issued permits. If the periodic program audit turns up instances of ineffective state permit administration, EPA should have the right (after a hearing) to: (1) withdraw the state's permitting authority or to (2) return

to reviewing and approving each state-issued permit for a probationary period.

This change will have two important advantages. First, the program audit would eliminate much of the manpower burden encumbent on EPA review and approval of state-issued NPDES permits. At the same time, EPA would still be assured an effective oversight role in reviewing state administration of the NPDES program. Second, permittees would no longer be caught in "best engineering judgment" disputes between state and federal permit writers on conditions of the permit not subject to uniform national standards.

We would like to work with the Subcommittee in developing an approach that would provide an option for periodic EPA audits of state NPDES programs, in lieu of EPA review of state-issued NPDES permits.

OTHER ISSUES OF INTEREST TO API/NFPA RAISED BY THE ADMINISTRATION'S BILL OR BY OTHERS

We have now reviewed those aspects of S. 2652 which we support with some modifications. We would now like to review a number of additional issues of interest to API/NFPA's members.

Civil Penalties/Felony Sanctions

Section 8 of the Administration's proposal would amend Section 309 of the 1977 Act to provide the Administrator with the authority to assess civil penalties of up to $10,000 per day for clear and well documented Clean Water Act violations which may not be sufficiently serious to require judicial action. In addition, Section 9 of S. 2652 amends Section 309 of the Act to provide that dischargers that knowingly violate certain Clean Water Act requirements would be subject to criminal penalties of up to $50,000

a day and/or imprisonment for up to two years. Both of these changes to the Clean Water Act are advocated by the Department of Justice (DOJ).

We support the need for strong enforcement authority to insure compliance with the Act and believe it is already provided. The penalties should be appropriate to the problems being caused. As yet, we have seen no basis in EPA's or DOJ's enforcement experience with the Act over the past ten years to justify the total scope of these changes. Dr. John Hernandez, EPA Deputy Administrator, and others have stated that those who would seek to change this Act must bear a heavy burden of proof to justify those changes. The Administration has not met its own burden in this case.

In addition, Section 9 of the Administration's proposal could result in EPA duplicating, or worse, undercutting state NPDES agency enforcement efforts. There is no useful purpose to be served by EPA initiating a separate enforcement action from that already undertaken by a state permitting agency. We understand that the Association of State and Interstate Water Pollution Control Administrators has similar problems with this provision. We endorse their views on this matter.

Before considering adoption of either Section 8 or Section 9 of the Administration's proposal, the Subcommittee should look very carefully at: (1) the need for these changes; and (2) the way these changes would be implemented in day-to-day enforcement decisions in both NPDES delegated and non-delegated states.

If the need exists to justify the adoption of additional penalty provisions, the legislative history accompanying the felony

sanctions proposal should make clear the intent stated by EPA that:

> "this provision is intended to address intentional violations of the Act occurring on a regular basis over an extended period of time that result in significant harm to public health or the environment and provide for the imposition of correspondingly stiffer penalties for such actions. This provision is not directed or intended to apply to isolated instances of either unpermitted dischargers or discharges exceeding permit limitations."

API/NFPA would strongly oppose any increased enforcement authorities which would be used indiscriminately for infrequent, and often unavoidable, minor excursions from NPDES permit limitations. While we are led to believe that this is not the intent of Section 9 of S. 2652, we feel that the legislative history should make this clear.

The Impact of Clean Water Act Regulatory Programs on the Federal Common Law

We understand that Congress may consider an amendment to the Clean Water Act that would allow suits alleging water pollution damage to be brought under the federal common law of nuisance. API/NFPA would oppose such a provision.

By way of background, a recent Supreme Court decision (Milwaukee v. Illinois) held that the Clean Water Act preempts available federal common law remedies. During Senate debates on the Municipal Waste Water Treatment Construction Grants amendments of 1981, the Senate adopted without discussion an amendment to the Clean Water Act to "make it clear that the Clean Water Act and other statutes do not displace, preempt, or in any other way disturb the federal common law."

House Conferees objected to the sudden insertion of the amendment, and it was subsequently withdrawn. In the Conference

Report, the Conferees noted "that failure to include this provision is without prejudice," and agreed to "examine further in the next session the best means to accomplish this intent."

The Supreme Court held that the federal common law should apply only when Congress has not "spoken to a particular issue," and recourse to common law becomes a necessary expedient. Such an expedient is not necessary here especially because the Milwaukee decision neither forecloses any course of action available to a plaintiff under state law, nor prohibits a state from imposing effluent restrictions more stringent than federal standards.

Companies who are legally operating under the conditions of their Clean Water Act waste discharge permits conceivably could be subject to a new wave of litigation brought under the federal common law if such an amendment is adopted. Such a provision would allow an affected state or municipality--and perhaps other private plaintiffs--to sue in federal court to effectively rewrite carefully written discharge permits. The amendment would involve the courts ever more deeply in such day-to-day regulatory activities as inspections, enforcement, and standards setting. This would, in effect, undercut the entire NPDES permit program. In our view, such an amendment would also subject, to further liability under the uncertain federal common law of nuisance standards, dischargers who in good faith invested significant amounts of capital to comply with federal and state regulatory programs and their permit requirements. The procedures set forth in the Act for participation by the public in the permit issuing process already provide an adequate opportunity for the identification and weighing of the interests of

third parties that may be affected by the discharge. Thus, on the basis of simple equity considerations, the proposed amendment lacks merit.

Some supporters of an amendment to the Clean Water Act have said that the Supreme Court decision is rapidly being extended to a number of other areas of Federal policy. If this does represent a spreading judicial problem, it is one which should be addressed on a much broader basis by the Judiciary Committees in both the Senate and the House, and not through piecemeal amendments to various Federal statutes which may be affected in different ways by the Supreme Court's holding.

Section 404 Dredged or Fill Permit Program

One issue that has raised substantial controversy this year is the Section 404 dredged or fill permit program. As the Subcommittee well knows, API/NFPA have been deeply involved, since 1975, in the implementation of the Section 404 program. We testified on this program in 1975, 1976, 1977, and 1979.

Many normal forestry farming and ranching activities are currently exempt from Section 404 permit requirements. Therefore, our industry faces neither the degree of exposure to the program that we did in the past nor the exposure presently faced by some other industry groups.

We support the current effort to make the Section 404 program more efficient through the regulatory reform initiatives undertaken by this Administration. We believe, however, that legislative change to the Section 404 program is premature at this time. The regulatory reform process should run its course. The program needs

a period of relative administrative stability before a comprehensive Congressional review is begun. Legislative action may ultimately be necessary, but this is an issue that should be addressed by Congress at a later time.

Section 302(b)(2) Economic Hearing Requirements

Under the 1977 Clean Water Act, BAT is the most stringent, national, uniform technology based standard. Pollution control requirements more stringent than BAT can visit severe adverse economic impact on manufacturing plants subject to such requirements, and can lead to the loss of jobs in the affected community.

To obviate this possibility, Congress provided, in Section 302(b), the opportunity for a hearing before EPA could require a discharger to go beyond the 1984 BAT level of control for water quality-related reasons. The hearing would be held to balance the relationship between the social and economic benefits of meeting the water quality standard in question against the social and economic costs, including economic dislocations to the affected community. The proposed standard would not be applied by EPA if the benefits of the additional treatment requirements beyond BAT are not worth the costs of their application. API/NFPA view the opportunity for a hearing as an essential part of the process to determine whether additional controls are justified.

Unfortunately, it is not clear that a Section 302(b) hearing is also available to a discharger in those states in which the state administers the NPDES program. This problem is particularly acute now that many states have been delegated authority to run the NPDES

program so that final action will be undertaken by the state rather than by the EPA. Accordingly, API/NFPA recommend that Congress amend Section 302(b) of the Clean Water Act to make clear that the hearing requirements apply when permitting authority has been delegated by EPA to the state water quality agencies. We look forward to working with the Subcommittee in developing language to implement such an amendment.

Disputed Data on Heavy Metals

The written testimony presented by Dr. Hernandez, Deputy Administrator, EPA, on July 21, 1982 makes reference to EPA's analytical efforts to review the criticisms directed at the pretreatment program as well as an evaluation of the cost-effectiveness of the present approach.

Included in his written testimony are two tables (Table 9, "Comparison of Direct or Indirect Dischargers," and Table 10, "Indirect Dischargers, Pound Per Year"). These tables contain erroneous information concerning the total pounds of heavy metals discharged by the pulp, paper and paperboard industry.

The tables were originally published by JRB Associates in their report, "Assessment of the Impacts of Industrial Dischargers on Publicly-Owned Treatment Works" prepared for EPA last year. Shortly after publication of the report, API/NFPA and the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) staff contacted JRB to point out the errors in figures used in the report.

JRB stated the figures had been supplied by EPA. Discussions with the Agency resulted in a January 25, 1982 letter to EPA noting

the discrepancy and asking for review of the EPA figures used in the report.

A review of the Agency estimates shows that an extremely high zinc concentration found at one mill was improperly taken as representative of a sizeable category. Once the error had been corrected, we were informed that the Agency estimates were much closer to those made by NCASI. EPA stated that revised values would appear in any further releases of the JRB document.

Unfortunately, these corrected figures did not appear in the tables used in Dr. Hernandez's testimony. In a letter to the Deputy Administrator (Appendix 2) API/NFPA has requested that steps be taken to correct the record.

Appendix 1

DATA ON EXTENSION OF STATE NPDES PERMITS DURING NEGOTIATIONS FOR PERMIT RENEWAL

SUBJECT: States that do not provide automatic extension of NPDES permits during negotiations attendent to renewal

SOURCE: Environmental Protection Agency, Industrial Permits Branch, Permits Division.

DATE: February, 1982

SUMMARY:

- 33 states have NPDES delegated programs
- 22 of the 33 states have a provision similar to Section 558.C of the Administrative Procedures Act to extend NPDES permits during negotiations attendant to permit renewal
- Those states (and territory) that do not have such a provision are:

  Vermont
  Connecticut
  Virgin Islands
  Virginia
  Delaware
  Mississippi
  Minnesota
  Kansas
  Missouri
  Nebraska
  Nevada

Appendix 2

API/NFPA Environmental and Health Program

American Paper Institute
(202) 332 1050
National Forest Products Association
(202) 797-5800
1619 Massachusetts Ave., N.W., Washington, D.C. 20036

August 12, 1982

Dr. John W. Hernandez, Jr.
Deputy Administrator (A-101)
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Dear Dr. Hernandez:

In your written testimony before both the Senate Environmental Pollution Subcommittee and the House Water Resources Subcommittee on July 21 and 27, 1982, respectively, reference was made to EPA's analytical efforts to review the criticisms directed at the pretreatment program as well as an evaluation of the cost-effectiveness of the present approach. Specifically, on Page 59 of your testimony before the Senate, you state that the objective of the regulatory impact analysis was to "quantify the magnitude of the problems caused by indirect industry dischargers."

Included in the written testimony are two tables (Table 9, "Comparison of Direct or Indirect Dischargers," and Table 10, "Indirect Dischargers, Pound Per Year). You should be aware that these tables contain erroneous information concerning the total pounds of heavy metals discharged by the pulp, paper and paperboard industry.

The tables were originally published by JRB Associates in their report, "Assessment of the Impacts of Industrial Dischargers on Publicly-Owned Treatment Works" prepared for EPA last year. Shortly after publication of the JRB Associates Report, the American Paper Institute and the National Forest Products Association (API/NFPA) and the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) staff contacted JRB to point out the errors in figures used in the report.

JRB stated the figures had been supplied by EPA's Office of Enforcement, who in turn had received the figures from the Office of Water Regulations and Standards. Discussions with the Agency

resulted in a January 25, 1982 letter to EPA noting the discrepancy and asking for review of the EPA figures used in the report (copy attached).

A review of the Agency estimates shows that an extremely high zinc concentration found at one mill was improperly taken as representative of a sizeable category. Once the error had been corrected, we were informed that the Agency estimates were much closer to those made by NCASI. For the purposes of comparison, the old EPA figures estimated that the pulp and paper industry indirect dischargers release 3.8 million pounds of heavy metals per year. As we understand it, the revised EPA estimate is 0.92 million pounds per year. NCASI estimates 0.60 pounds per year. EPA's Effluent Guidelines Division staff stated that the revised estimates would be communicated to the Monitoring and Data Support Division, and that revised values would appear in any further releases of the JRB document.

Unfortunately, these corrected figures do not appear in the tables used in your testimony. Knowing the lasting significance of Congressional testimony, we would urge that you take steps to correct your written testimony for the record, as well as assure the use of the correct figures within the Agency for any further calculations.

If you need any additional information or have questions concerning the attached material, please do not hesitate to call me.

Sincerely,

Pat Hill

Patricia K. Hill
Director, Water Quality
Programs

NATIONAL COUNCIL OF THE PAPER INDUSTRY FOR AIR AND STREAM IMPROVEMENT, INC.
260 MADISON AVE. NEW YORK, N.Y. 10016 (212) 532-9000

William J. Gillespie
Control Technology Program Mana
(212) 532 9349

January 25, 1982

Mr. Robert Dellinger, Acting Chief
Wood Products and Fibres Branch
Effluent Guidelines Division (WH 552)
U.S. Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

Dear Bob:

As follow-up to our recent telephone conversation I am sending you a copy of the worksheet we used to estimate the total heavy metals discharge from direct and indirect dischargers in the pulp and paper industry. As I pointed out on the phone, I am concerned that our figures do not agree with those developed by your office for use in the Office of Water Enforcement report entitled "Assessment of the Impacts of Industrial Dischargers on Publicly Owned Treatment Works."

I have specific reference to Table 1-1 (p. 1-3) of that document. A comparison of the values presented in that table with our estimate is given below.

	EPA	NCASI
Indirect (10^6 lb/yr)	3.8	0.6
Direct Raw (10^6 lb/yr)	4.6	2.0
Direct Treated (10^6 lb/yr)	2.6	1.4

As mentioned, our greatest concern is with the indirect discharge level, both because it shows the greatest discrepancy and because it is the most significant for the purpose of the OWE document.

I have also enclosed a sheet of explanatory notes for the worksheet which gives the sources of the data we used (all EPA figures) and our calculation methods.

I would appreciate it if your staff could either (a) review our work, or (b) supply us with your work sheets so that we can resolve the causes for the discrepancy in our two estimates. Please call if you have any questions.

Very truly yours,

Bill

William J. Gillespie
Control Technology Program Mgr.

WJG:gs
Encl

cc: Thomas O'Farrell

97-999 O—82——30

STATEMENT BY

JON OLSON

Mr. Chairman, my name is Jon Olson. I am the District Director of the Sanitary District of Rockford in Illinois and I am here today in my capacity as Chairman of the Association of Metropolitan Sewerage Agencies' Pretreatment Committee. Accompanying me is Ron Linton, The Executive Director of AMSA.

I appreciate this opportunity on behalf of AMSA to address the Committee on the reauthorization of the Clean Water Act, particularly as it relates to the Environmental Protection Agency's proposals to modify existing pretreatment requirements. This issue is of critical importance to AMSA's 87 member agencies who serve over 70 million people and thousands of industries in the nation's major metropolitan areas. By EPA's own account, roughly 273 of the 465 facilities owned and operated by AMSA member agencies are subject to existing legislative and regulatory pretreatment requirements. This represents only about 13% of the estimated 2000 publicly owned treatment works required to satisfy federal pretreatment objectives. However, the volume of wastewater discharged to the AMSA facilities accounts for over 50% of the total wastewater nationwide subject to pretreatment controls.

At the outset, I would like to reaffirm the long standing commitment that AMSA member agencies have to pretreatment. They appreciate the importance of controlling industrial toxic waste discharges to their systems and they are dedicated to implementing environmentally sound and economical industrial pretreatment programs that address their local needs. Many of these agencies had effective pretreatment programs in place prior to 1972, when federal pretreatment requirements were first imposed. And all of our members now have programs that either comply or will soon comply with Federal pretreatment requirements. In many cases, where needed for plant or environmental protection, these programs require industry to meet even more restrictive discharge limitations than those being considered by EPA.

The AMSA Pretreatment Resource Reader, which I am submitting for the record of this hearing, clearly demonstrates the practical realities of pretreatment and the progress that has already been achieved through local pretreatment controls.

Developed under the terms of a cooperative agreement with EPA, the purpose of the Reader is to assist smaller and less sophisticated agencies in the development and implementation of local pretreatment programs. Inasmuch as it relies on the expertise and experience of our member agencies, it reinforces the need to acknowledge the measures that these agencies have already instituted to control the discharge of industrial wastes. At the same time, the Reader raises serious questions about the continued reliance on uniform national standards - which in our judgment are technically unsound and insensitive to the needs of local communities -- as the driving force behind the federal program. These standards may be important in the absence of effective local controls. But they are a poor substitute in cases where municipalities have established local programs and standards to protect plant operations and sludge quality and to meet permit requirements for their facilities.

We have worked with EPA on pretreatment for a number of years and believe the Agency has made great strides towards the development of a more sensible and flexible national pretreatment program. Most recently, this has been reflected in the legislative proposals the Agency submitted to the Congress. In our judgment, this is good legislation that reaches out and genuinely addresses the issues that have stalled the pretreatment program in the past.

We have participated in deliberations with the Agency on these proposals and appreciated the Agency's openness and sincerity in dealing with the issues. While we did not always agree, our honest exchange of views on how best to deal with pretreatment has resulted in proposed legislation that addresses many of our concerns. Indeed, with essentially two modifications, the proposed legislation can lay the foundation for an outstanding federal pretreatment program that AMSA member agencies could support and live with.

During our deliberations with EPA, AMSA recommended legislation to establish

a process by which local agencies could develop and implement effective local programs approved by EPA or the States. Under our approach, such a local program could be established if the local agency:

- o has in effect for its treatment works system a local pretreatment program, which includes standards for introduction into the treatment works of those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works.
- o has the legal, financial, technical, analytical and administrative capability to ensure compliance with local agency standards including, but not limited to, the authority and resources to monitor and collect samples from industrial dischargers and to require such dischargers to install necessary control technologies and processes.
- o has an evironmentally acceptable sludge use or disposal program that meets state and federal requirements applicable to the program selected by the local agency or has received approval for its selected sludge use or disposal program and is subject to a state or federal compliance schedule.
- o is in compliance with or is meeting a state or federal compliance schedule to comply with any effluent limitation applicable to the agency's treatment works.

For convenience, we coined the phrase "certification" to describe our approach. To us this means that a local agency has met the above requirements and, accordingly, can rely on local control measures in lieu of national categorical standards to regulate industries tied into its wastewater treatment system. National standards would remain in place for communities that are either unwilling or unable to meet the requirements for "certification". As an added measure of protection, a local agency initially meeting these requirements would have to demonstrate continued compliance with these requirements on a yearly basis or face the prospect of reverting to national categorical controls.

As I have already indicated, the EPA proposals regarding pretreatment do address many of our concerns. They do this without sacrificing the environmental objectives of the program. Pursuant to these amendments, general prohibitive standards for all indirect industrial dischargers would remain in effect and EPA

would have the authority to promulgate national categorical standards on a discretionary basis. The proposed amendments would acknowledge the capabilities of local agencies by authorizing exemptions from both program and categorical standard requirements provided local agencies satisfied specified criteria. These criteria are similar to those initially proposed by AMSA. Generally, they require satisfaction of national pretreatment objectives as well as adequate legal, financial, technical, analytical, administrative, and enforcement authority to ensure the successful operation of a local program. As AMSA has recommended, existing program requirements, including the need to enforce national categorical standards, would remain in effect for municipalities that are either unwilling or unable to satisfy the specified criteria.

It is clear that EPA's intention is to give local communities with successful operating programs the opportunity to deal with pretreatment in the context of these programs without the necessity of complying with additional federal requirements. EPA would accomplish this objective through an exemption process for federal pretreatment program and categorical standard requirements. The conditions that EPA would require a treatment facility to satisfy to qualify for exemptions are basically sound. Two of these conditions, however, would unnecessarily restrict such a facility's ability to qualify for exemptions notwithstanding the effectiveness of its local pretreatment program. These conditions, one dealing with secondary treatment and the other with effluent limitations to protect designated water quality uses, ignore the need for a coordinated approach in major metropolitan areas and pay lip service to the local standards that have been developed by local agencies to control the indiscriminate discharge of industrial toxic wastes.

To be eligible for an exemption under the proposed legislative language, a treatment plant would have to be in compliance with secondary treatment or have a Section 301(h) waiver. In our view, the issues of secondary treatment and pre-

treatment are simply not related, with the result that this condition will only complicate the objective consideration of either issue on its own merits. Both toxics and plant overload of conventional pollutant levels can be controlled by well-designed and evaluated programs. And while secondary treatment plants have been shown to remove considerably more of the influent heavy metals and no doubt more toxic organics -- although there is less data available with regard to these pollutants -- this fact alone does not necessarily imply that primary treatment plants cannot also meet their applicable NPDES permit requirements for these pollutants. What it indicates is that, all other factors being equal, a primary treatment plant may have to establish more stringent pretreatment standards for these parameters than a secondary treatment plant in order to meet the same effluent standards. Due to differences in local conditions, this is essentially what has to be done on a case-by-case basis even if both treatment plants provide secondary treatment.

For these reasons, we do not believe that secondary treatment should be a determining factor in whether a local agency is eligible for exemptions from federal pretreatment categorical standard and program requirements. Accordingly,we recommend modification of this provision to include primary facilities that are on a schedule to comply with secondary treatment requirements as well as primary facilities not on such a schedule that can demonstrate no adverse water quality impacts in local receiving waters. Our recommended modification of this condition is not intended to avoid environmental protection. Rather, it is intended to ensure the ability of local agencies to implement pretreatment controls on a coordinated basis, taking into account facilities providing less than secondary treatment. We believe EPA should focus attention on these local requirements rather than making an arbitrary decision based on the type to treatment that is being provided.

Another condition which may serve to restrict the ability of a local agency to qualify for exemptions is a requirement that effluent limitations exist for a treatment works for any pollutant which passes through the treatment works in quantities sufficient to interfere with the attainment or maintenance of designated uses of the body of water into which the treatment works discharges. This condition is a positive indication of a shift on EPA's part towards water quality based standards. However, it is unlikely that the states or EPA can establish toxic limits for POTW effluents in the near term. EPA's proposed language and the uncertainty surrounding the feasibility to develop such controls should not be allowed to hamper the granting of applications for exemptions. If this were to happen, then local agencies would have to fall back on national categorical standards which are not geared towards achieving water quality objectives in the first place.

This does not make sense in cases where municipalities have developed and implemented local protection criteria designed to achieve plant operation, sludge and pass through protection. Accordingly, we recommend modification of the language of this condition to require local compliance or adherence to a schedule for compliance with only those effluent limitations which are in place at the time that a local agency applies for exemptions. This would enable local agencies to move forward with the implementation of their local programs and standards. They would still be required to meet additional effluent limtiations as the state of the art advances and State agencies and EPA are able to incorporate additional effluent limitations in POTW permits.

AMSA views these changes to the proposed legislation as essential to assuring that effective pretreatment controls are able to operate at the local level. We also favor a public hearing requirement before an exemption can be modified or rescinded. In addition, we support language that would require the granting or

denial of an exemption within 180 days of receipt of a completed application by EPA or the appropriate state agency. We believe that many agencies throughout the nation are in a position at this very time to qualify for exemptions from program and categorical standard requirements and that any delay is therefore unwarranted.

On a related subject addressed by the proposed legislation, AMSA takes strong exception to the proposed expansion of the "paramount interest" exemption under Section 313(a) of the Act. If these amendments became law, the President would have authority to exempt federal facilities from pretreatment and other toxic requirements they are now required to meet. AMSA member agencies would be adversely affected by this amendment inasmuch as federal facilities are now required to meet local pretreatment program requirements and standards. This proposal would interfere with their efforts to control toxic discharges to their systems as well as their efforts to successfully apply for exemptions under the proposed legislation. It also may very well open their facilities to liability for pretreatment or permit violations resulting from a federal facility's failure to comply with such standards.

AMSA also specifically opposes Sections 8 and 9 of the proposed legislation. These are designed to increase the severity of civil and criminal penalty provisions applicable to municipal agencies and officials under Section 309; to extend the coverage of Section 309 to include Section 405; and to authorize the Administrator of EPA to levy civil penalties after only a public hearing and without resort to prosecution by the Department of Justice. In our view, the existing civil and criminal penalty provisions of Section 309 are quite severe. As a result, there is no need to threaten municipal officials with more onerous penalties, particularly as the federal government seeks to curtail its financial commitment to the municipal program and as many of the regulatory and compliance

standards are being revised. It is particularly inappropriate to apply the sanctions of Section 309 to Section 405, considering the Agency's lack of progress in implementing the latter Section and its continuing failure to adopt a comprehensive approach to sludge management. The addition of administrative penalties to Section 309 is particularly ill-advised. This would make it far too easy for EPA to harass municipal agencies and officials over mere technical violations. It would also allow the Administrator to circumvent important procedural rights guaranteed to defendants under existing enforcement provisions. If a violation is not sufficiently serious to merit prosecution by the Justice Department in even a civil action, we believe it should not be pursued.

In conclusion, I would like to reaffirm AMSA's commitment to the need for a federal legislative and regulatory pretreatment strategy that acknowledges the primary role of local officials in framing and implementing necessary controls. We believe that the legislation proposed by EPA is a step in the right direction as it would provide the necessary latitude to address local problems in a manageable, cost-effective, and environmentally responsive manner. With the modifications that we proposed, it can serve to ensure the development and implementation of effective local programs. In the absence of such legislation, local agencies will continue to have to operate their programs in the midst of the uncertainty and confusion that has plagued the program since its inception. We believe that too much time has already been lost and that municipal agencies should be allowed to go forward without further delay.

This concludes my prepared statement. If you have any questions,I would be most pleased to answer them at this time.

STATEMENT BY

THE NATIONAL ASSOCIATION OF METAL FINISHERS

EXECUTIVE SUMMARY

Since the enactment of the 1972 Amendments to the Clean Water Act, EPA has been struggling to implement a pretreatment program that relies on national, "categorical" technology-based standards. Few standards have been established to date. EPA's electroplating pretreatment standards will have a crushing economic impact, closing 587 job shops and requiring over $1.3 billion in capital costs.

EPA's general implementing regulations have also been in disarray. The Act provides for the granting of "credits" reflecting removal of pollutants by POTWs, but EPA's removal credit regulations have proved unworkable. Redundant treatment thus now seems inevitable.

To a degree not previously expected, conventional secondary treatment systems used by municipalities have succeeded in removing toxic pollutants in an efficient manner. Moreover, the imposition of national categorical standards will not significantly eliminate water quality problems, where they exist. It is thus time to question the basis for the current program.

Congress should allow the development of pretreatment programs by local authorities. The POTW is in the best position to address any local problems that exist. POTWs have for years been implementing successful local programs. Allowing for local programs will avoid costly, redundant treatment and focus the program on site-specific solutions to interference and passthrough problems, where they exist.

Mr. Chairman and members of the Subcommittee, I am William D. Wiggins, President of Automation Plating Corporation of Glendale, California. I am here today representing the National Association of Metal Finishers ("NAMF"), which I serve as a member of the Board of Directors and the Executive Committee. I am the immediate past president of NAMF and an active member of the association's Legislative Action Committee. I have had a long standi:g interest in the Clean Water Act in general, but most particularly in that Act's provision for a federal water pretreatment program, which is of paramount concern to the metal finishing industry.

NAMF appreciates this opportunity to appear before you and present our views on amending the Clean Water Act and, more specifically, on the proposed amendments to the pretreatment section of the Act (Section 307) governing the indirect discharge of waters into publicly owned treatment works (POTWs). NAMF has been in the forefront of activities surrounding the pretreatment program since its members represent one of the first industries for which industry-specific, or categorical, pretreatment standards have been developed by EPA. Approximately eighty-five percent of the metal finishing firms across the United States discharge into POTWs. Therefore, this industry is significantly and directly affected by the pretreatment program.

We feel that this places us in a unique position to comment on the pretreatment program and the proposed amendments.

Mr. Chairman, in view of the large number of electroplating firms in Rhode Island that service the jewelry and other industries, you too must be particularly aware of the critical importance of the pretreatment issue as it relates to the metal finishing industry and the resulting economic and environmental impacts.

Let me begin by stating that NAMF is committed to the objectives of the Clean Water Act and recognizes its responsibilities under the law. This is evidenced by the association's active program furnishing guidance and technical assistance to its members concerning the requirements of the law and the implementing regulations. NAMF's program includes the establishment of the Metal Finishers' Foundation, which has funded studies to explore new processes for recovering metal from electroplating sludges and other water pollution control mechanisms. NAMF also sponsors annual technical seminars and other forums for educational exchange on this topic.

But NAMF is equally committed to the principle that the Clean Water Act can best be implemented at the local level where appropriate, providing site-specific flexibility and targeted controls focused on a particular local water quality situation. The development of local pretreatment programs by qualified POTWs in lieu of national categorical standards is perhaps the best example of a case where additional local control and increased flexibility is both necessary and

appropriate. Before I discuss this concept and NAMF's comments on EPA's proposed amendments in more detail, it is useful to review some background information on NAMF and its historical involvement with categorical pretreatment standards.

NAMF AND THE METAL FINISHING INDUSTRY

Briefly stated, metal finishing is the process of coating an object, usually made of metal or plastic, with one or more layers of another metal, paint, or plastic. Electroplating is one metal finishing process by which metal is coated onto a basis material through the use of an electric current. Metal finishing results in surface alterations that produce important functional changes for the product. These include corrosion resistance, temperance resistance, improved lubricity, abrasion resistance, insulation, enhanced appearance, and better safety features. Brass, chrome, silver, nickel, gold, zinc, and copper are examples of the coatings used in the metal finishing industry, each possessing unique and valuable properties.

The end metal finishing products, such as ball bearings, serve as vital components of industrial equipment. Furthermore, metal finishing helps conserve resources by extending the life of products. Thus, the metal finishing industry provides an absolutely essential service to the manufacturing economy of this country in such important areas

as the medical, recreational, aerospace, defense, electronics, auto, and steel industries, to mention a few. Without it, this country's basic manufacturing industries could not survive.

The industry is composed of two basic types of plants -- the larger so-called captive shops and the smaller independent job shops. The captive shops perform electroplating as part of or in addition to the manufacture of various products. According to EPA, the captive shops represent the major portion of the industry.[1]

In contrast, the smaller independent job shops perform electroplating as their primary line of business and do not own or manufacture products that they electroplate. Job shops are small independent electroplating businesses, employing 15 to 20 people and having capital of approximately $250,000 and annual gross revenues of $650,000. Out of the 7783 establishments estimated by EPA as engaged in electroplating operations, approximately 2734 of these establishments are job shops, employing 62,800 workers.[2] NAMF itself has about 1200 of these job shops as members.

The majority of job shops are located in large urban areas and are indirect dischargers into POTWs. They are regulated by local municipal ordinances and by contracts with

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[1] 47 Fed. Reg. 1730 (Jan. 13, 1982).

[2] 44 Fed. Reg. 52594 (Sept. 7, 1979).

municipalities and sanitary districts. In addition, these small job shops function in the highly competitive metal finishing industry, competing with the larger captive shops which dominate the industry. As a result of this intense competition and their small size, individual independent job shops generally have only modest returns on investment profits and modest borrowing capabilities.

The foregoing distinction of the small electroplating job shops from the rest of the metal finishing industry is important for the Committee to note. Electroplating job shops, which are indirect dischargers, account for only a relatively small percentage of the overall effluent discharged by the entire industry. These are distinctions that categorical standards blindly ignore. Nonetheless, it is these very electroplating job shops, that are small and economically vulnerable, which EPA is requiring immediately to commit substantial funds in order to attempt compliance with the categorical pretreatment standards for electroplating.

Indeed, according to EPA's own estimates, existing regulations for electroplating pretreatment standards will result in the closure of approximately twenty percent of the job shops in this country. Specifically, 587 job shops, employing 9653 workers, may have to shut down as a result of the regulations. Moreover, this estimate is only "an approximation, not a 'worse case' outside limit."[3]

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[3] Id.

In addition, those firms which manage to survive must bear the burden of approximately $1.3 billion in capital costs and nearly $500 million in annual operating costs that these electroplating standards will impose.[4] Our own industry estimates of this already drastic impact are even higher. I will elaborate on the economic impact of these regulations in more detail later. Suffice it to say that this projected impact has reinforced industry's belief that only through pretreatment programs at the local level can the Clean Water Act objective of providing the necessary environmental protection be achieved while reducing unwarranted and extreme economic repercussions.

LOCAL PRETREATMENT EFFORTS

There are various treatment technologies that are available for use in the metal finishing industry. A conventional treatment system for job shops would consist of chromium reduction, cyanide oxidation, pH adjustment for precipitation, clarification, and final neutralization before discharge. This is the basic technology upon which EPA has based its pretreatment standards for electroplating. This technology is widely used in areas of the country in which pretreatment programs are currently being enforced. Additional steps are possible with more advanced technology, but the use of such technology would

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[4] Id. at 52593-94. This estimate was based on 1976 capital and financing costs which have significantly increased since then.

be prohibitively expensive and unnecessary for a typical job shop.

Well before EPA began to implement its general pretreatment program, a number of municipal treatment authorities had been implementing local pretreatment programs applicable to industrial wastes, including metal finishing wastes, for years with considerable success. We believe that this body of experience has been largely ignored under the current scheme. The Metropolitan Sanitary District of the city of Chicago, for example, has had in operation an effective industrial waste control program since 1969. It has not experienced interference or pass-through problems at its treatment system plants. As another example, the City of Los Angeles and Los Angeles County Sanitation District have had a pretreatment program in effect since 1976. This was developed pursuant to a 1972 statewide program in California that requires all municipal districts to establish pretreatment standards necessary to ensure compliance with the POTW's permit requirements. The Los Angeles pretreatment program also has been successful, and there have been no interference and pass-through problems.

A significant aspect of the experience in Chicago and Los Angeles is that the industrial pretreatment limits that these municipalities have found appropriate and necessary are fairly moderate. These limits are readily met by most metal finishing companies without severe requirements for the installation of expensive pollution control equipment. There may well

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be situations where more sophisticated controls for indirect discharges are needed. However, federal standards mandate such controls with no regard for the local POTW's capability nor a particular firm's historical efforts to clean up its effluents.

I would illustrate this by describing the system that I have installed at my own plant in Glendale, which is subject to the Los Angeles City regulations. The treatment for our plating rinses consists of cyanide destruction, neutralization, precipitation, and a filter press that creates a final sludge. On the cleaning line we have a separate system consisting of a clarifier, neutralization, and precipitation. While I do not wish to consume the Committee's time with this topic since it is more appropriately an issue under the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, I would point out that such sludge build-up is becoming an increasingly serious problem and can certainly be attributed, in part, to unnecessary pretreatment requirements.

At my plant in Glendale, we remove approximately ninety percent of the heavy metals in this manner. This system has cost our company approximately $260,000 in capital. In addition, the operating costs amount to approximately $106,000 annually, which is approximately eight percent of our company's total sales. In order to meet EPA's categorical standards, my costs would be twice as high. I submit, Mr. Chairman, that such costs are unnecessary. Further, my situation, which is by no means unique to the industry, underscores the point that

rigid national standards do not take into account the particular local situation, including previous efforts on the part of POTWs or the industry to obtain clean water objectives.

THE STATUTORY SCHEME

The basic scheme for pretreatment requirements was first established by Congress in Section 307 of the Federal Water Pollution Control Act Amendments of 1972. 33 U.S.C. § 1317. Section 307(b) of the Act authorizes EPA to develop "pretreatment standards for introduction of pollutants into treatment works . . . for those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works." 33 U.S.C. § 1317(b). Congress was concerned with the discharge of pollutants that would damage, impair, or "interfere" with the efficiency of a municipal treatment works. Moreover, the legislative history indicates that Congress intended to prevent the discharge of pollutants that might "pass through untreated or inadequately treated into the Nation's waters."[5] Thus, the basic thrust of the statute is to prevent such "interference" and "pass-through."

The history of the 1972 Act also reflects a concern with overkill. The House and Conference Reports state that "[i]t is not intended that private pretreatment [facilities] be

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[5] H. R. Rep. No. 911, 92d Cong., 2d Sess. 113 (1972).

required as a substitute for adequate municipal waste treatment works."[6] This concern with overkill parallels the policy, discussed above, that pretreatment be required only where necessary to prevent interference and pass-through. Accordingly, Section 307(b)(1) specifically provides that if a POTW removes all or part of a toxic pollutant, "then the pretreatment requirements for the [indirect dischargers] may be revised by the [POTW] to reflect the removal of such toxic pollutant by [the POTW]." 33 U.S.C. § 1317(b)(1). This provision is the statutory mechanism to avoid requiring industries to build pretreatment systems that would duplicate treatment provided by municipal works resulting in increased or redundant treatment.[7]

An additional purpose of Section 307(b)(1) is to ensure that the removal achieved by the indirect discharger in concert with the removal achieved by the POTW equals the removal required of a direct discharger in the same industrial category:

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[6] Id.

[7] "Implementation of the Federal Water Pollution Control Act," H.R. Rep. No. 96-71, 96th Cong., 2d Sess. 40 (Comm. Print) (Dec. 1980) (hereafter "Oversight Report"). EPA has repeatedly emphasized the congressional intent underlying Section 307(b)(1) to prevent redundant treatment through the relaxation of pretreatment standards in light of POTW removal of pollutants. See, e.g., 44 Fed. Reg. 52603 (Sept. 7, 1979); 46 Fed. Reg. 9415, 9423, 9466 (Jan. 28, 1981); Dr. John W. Hernandez, Jr., Technical Statement for the Record Before the Subcomm. on Water Resources of the H. Comm. on Environmental and Public Works and Transp., at 46-47 (Feb. 24, 1982).

> "[R]emoval allowances must reflect the degree of reduction of pollutants achieved by the treatment works."

Conf. Rep. No. 830, 95th Cong., 1st Sess. 87 (1977).

Congress also intended that pretreatment standards, where necessary, be based on appropriate technology. Section 307(b)(2) refers to the revision and presumably the establishment of standards based on "control technology." 33 U.S.C. § 1317(b)(2). Section 307(b)(3) makes it clear that standards may be established for a "category" of sources, indicating that there can be differences in the appropriate pretreatment technology among various industries. 33 U.S.C. § 1317(b)(3). This means that the regulations must be based on appropriate control technology and that the standards must be economically achievable.

Finally, Congress directed EPA to establish national pretreatment standards that dealt only with "the most significant pretreatment problems."[8] Congress intended that, apart from such significant problems, pretreatment standards would be established by state and local governments. The Senate Report directed EPA to encourage state programs and "to reduce Federal involvement in this area to an absolute minimum."[9]

EPA's PRETREATMENT PROGRAM

Section 307(b) of the Act has been implemented by EPA through two interrelated regulatory programs: categorical pretreatment standards and general pretreatment standards.

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[8] H. R. Rep. No. 911, supra, at 113.

[9] S. Rep. No. 414, 92d Cong., 1st Sess. 61 (1971).

Electroplating Pretreatment Standards. The first EPA program under Section 307(b) consists of national categorical pretreatment standards containing discharge limits applicable to various categories of industrial users, such as the electroplating industry. These national categorical pretreatment standards for indirect dischargers typically are the equivalent of technology-based standards for direct dischargers.

Generally, EPA regulates an entire industry by setting effluent limits for both indirect and direct dischargers in an industry at the same time. However, with regard to the metal finishing industry, on September 7, 1979, EPA established limitations only for indirect dischargers by promulgating categorical pretreatment standards. 40 C.F.R. Part 413.[18] Moreover, although EPA estimates the total number of metal finishing plants to be over 31,000 and defines 45 operations as "metal finishing" operations involving wastewater potentially containing toxic metals (46 Fed. Reg. 34055-56, June 30, 1981), the Agency nonetheless limited its categorical pretreatment standards to eight subcategories relating only to the electroplating segment of that industry. 44 Fed. Reg. 52590 (Sept. 7, 1979).

On July 3, 1980, EPA published proposed amendments to the electroplating pretreatment standards and requested public comments, which were received from NAMF,

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[18] See 44 Fed. Reg. 52590 (Sept. 7, 1979).

individual industries, and public sewage agencies.[11] Despite the controversial nature of the standards, as evidenced by those comments, EPA promulgated the amendments to the standards in the final days of the Carter Administration.[12] EPA later extended the compliance date for the electroplating pretreatment regulations to January 28, 1984, in light of the uncertainty surrounding the interrelated provisions of the general pretreatment regulations, such as the removal credit provision, and in order to allow the Agency time to consider alternatives to the treatment technologies upon which the regulations are based.[13]

General Pretreatment Standards. The second interrelated pretreatment program under Section 307(b) is contained in EPA's General Pretreatment Regulations, first promulgated in 1978. 40 C.F.R. Part 403.[14] These regulations provide an overall regulatory framework for pretreatment and contain: general discharge prohibitions that apply to all industrial users in order to prevent interference and pass-through; provisions for the adjustment of pretreatment standards through the grant of removal credits; and the requirement that local POTWs or states develop administrative mechanisms to enforce

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[11] 45 Fed. Reg. 45322 (July 3, 1980).

[12] 46 Fed. Reg. 9462 (Jan. 28, 1981).

[13] 46 Fed. Reg. 43972 (Sept. 2, 1981).

[14] See 43 Fed. Reg. 27736 (June 26, 1978).

the general discharge prohibitions as well as the separately published categorical standards.

In 1979 EPA published proposed amendments to the general pretreatment regulations.[15] Numerous comments were filed with EPA pointing out difficulties with the proposed regulations. For example, after reviewing the 1979 proposed regulations, municipal representatives uniformly concluded that the removal credit scheme was unworkable because it imposed too many restrictions.[16]

The controversy over EPA's pretreatment program came to the attention of Congress the following year. In 1980, hearings were held by the Oversight Subcommittee of the House Committee on Public Works and Transportation that revealed broad dissatisfaction with the pretreatment program by both POTWs and industry. Following those hearings, the Oversight Subcommittee issued a detailed report which confirmed that the complexity of EPA's removal credit regulations was leading many municipalities to conclude that these provisions were unworkable and that the entire pretreatment program should be restructured.[17]

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[15] 44 Fed. Reg. 62260 (Oct. 29, 1979).

[16] During 1980 and 1981 the Association of Metropolitan Sewage Agencies ("AMSA") sponsored a series of conferences entitled: "Removal Credits -- Fact or Fiction."

[17] Oversight Report, supra, at 59.

Nevertheless, on January 13, 1981, EPA promulgated final amendments to its general pretreatment standards, including provisions for removal credits.[18] However, due to the controversy and confusion surrounding the pretreatment program, the 1981 general pretreatment regulations were suspended for over one year. Underlying issues regarding these regulations remain unresolved.

THE NEED FOR REFORM

The heart of the problem with the current program lies in the categorical pretreatment standards. NAMF is committed to the goal of cleaning up the nation's waters but believes that the Act has not been implemented with adequate analysis and balance. The need for reform of the pretreatment program is confirmed by essentially three points, as discussed in more detail below: first, there is a tremendous amount of confusion in the industry and among sanitary districts concerning the pretreatment program, particularly in light of problems relating to removal credits; second, requiring compliance with the electroplating pretreatment standards by the present January 1984 deadline would inflict disastrous and unnecessary impacts on the electroplating industry, resulting in the closure (by EPA's estimates) of twenty percent of the job shop platers in the country; and third, these stringent

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[18] 46 Fed. Reg. 9404 (Jan. 28, 1981).

national standards are not necessary to protect the environment and provide no real benefit to water quality.

We believe that it is time to reassess the entire pretreatment program, and to consider the merits of returning control over the program to local municipalities and abandoning national pretreatment standards. Industry and municipal representatives have, for some time, been questioning the need for national categorical pretreatment standards. NAMF strongly believes that control over pretreatment standards should be returned to municipal sanitary authorities, which should establish such standards that are necessary to meet NPDES permits and other environmental requirements. Local control over pretreatment requirements would allow POTWs and industry to focus their attention on local problems. It will also avoid redundant treatment that will otherwise inevitably result from the program.

Confusion in the Pretreatment Program. As noted ealier, in 1980 the Oversight Subcommittee of the House Committee on Public Works Transportation held a series of hearings on the implementation of the Clean Water Act. Particular attention was given to the pretreatment program and the Subcommittee heard detailed testimony from municipal authorities as well as industry. Those hearings resulted in a detailed report, which was signed by virtually all of the senior members of the House Public Works Committee. In that significant report,

the Subcommittee concluded that a more reasonable approach to pretreatment "is absolutely necessary."[19]

In particular, the Subcommittee was troubled by the fact that the complexity of EPA's removal credit regulations was leading many municipalities to conclude that these provisions are unworkable. As the Subcommittee recognized, this would result in forcing industries to duplicate toxic control capabilities already present in muncipal treatment works -- a situation which Congress specifically intended to avoid through the statutory provision of Section 307(b)(1).[20] The Subcommittee thus concluded that fundamental changes to the pretreatment program are needed:

> The primary concern of the pretreatment program should be the quality of the water that is discharged from the municipal works. So long as a municipal treatment plant can meets its permit requirements, there is no rationale for Federal meddling in local decisions as to how this should be accomplished.[21]

Indeed, the Subcommitee went so far as to recommend a major change in the pretreatment program -- that is, that the use of EPA's national pretreatment standards be completely abandoned and that Section 307(b) be amended to allow pretreatment requirements to be established by local authorities on the basis of their NPDES permit:

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[19] Oversight Report, supra, at 59.

[20] Id.

[21] Id.

> Steps should be taken immediately to allow for the implementation of industrial pretreatment programs by municipal treatment authorities without further delay. In this regard, the Subcommittee recommends that the law be amended to allow pretreatment requirements for industrial discharges to municipal treatment plants to be established by local treatment authorities on the basis of their National Pollution Discharge Elimination System (NPDES) permit, and that use of national categorical pretreatment standards be abandoned.[22]

With regard to electroplaters, the pretreatment program is even more confused in light of EPA's intention to promulgate final metal finishing regulations "more comprehensive than the electroplating regulations, and...expected to supersede the electroplating pretreatment standards."[23] Similarly, in September 1981 EPA acknowledged that the electroplating standards themselves, as well as related provisions of the general pretreatment regulations, may be modified.[24]

In late December 1981 EPA also made public its contractor's report on options for possible reform of the pretreatment program -- JRB Associates, Inc., "Assessment of the Impacts of Industrial Discharges on Publicly Owned Treatment Works" (Nov. 20, 1981)(hereafter "JRB Report").[25] This

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[22] Id.

[23] 46 Fed. Reg. 34055 (June 30, 1980).

[24] 46 Fed. Reg. 43973 (Sept. 2, 1981).

[25] 46 Fed. Reg. 62098 (Dec. 21, 1981). NAMF would emphasize that none of the particular options contained in the JRB Report embodies the approach that NAMF would prefer. Options

(footnote cont'd)

report strongly supports a move in the direction of greater local control and decreased reliance on national categorical standards.[26]

The 1981 report itself addressed the key question of whether or not uniform application of categorical pretreatment standards is necessary or useful, and candidly acknowledged a lack of detailed data and reliance on a number of assumptions. The report emphasized that problems that exist with respect to water quality and sludge disposal are highly site-specific. JRB Report, supra, at 4-1. Such problems cannot readily be addressed by uniform, national standards, but instead must be dealt with by site-specific solutions. Consistent with this conclusion, EPA recently confirmed that it

> is actively considering alternatives to the current [general] pretreatment program, including a move in the direction of greater local control and responsibility for pretreatment requirements [as with removal credits]. We are also considering a decreased emphasis on mandatory, national technology based categorical standards.[27]

(footnote cont'd)

4 and 5, perhaps, are the closest to the approach endorsed by NAMF but both would involve the use of national categorical standards as a fall back in the event that the POTW does not comply with the technology of water-quality based requirements. Under NAMF's approach, if there were a water quality or a permit problem not being addressed by the POTW, the state or the EPA would develop a local remedy to deal with that specific problem.

[26] See id. at 62099.

[27] 47 Fed. Reg. 4520 (Feb. 1, 1982).

The Government Accounting Office ("GAO") also recently concluded that there was no assurance that categorical pretreatment standards "are equitable or even environmentally rationale." GAO, "Report to the Administrator, Environmental Protection Agency: A New Approach is Needed for the Federal Industrial Wastewater Pretreatment Program," at 8 (Feb. 19, 1982) (hereafter "GAO Report"). The GAO report further confirmed that "it is highly unlikely that the [pretreatment] program can be fully implemented within the currently established time frames" and cautioned against too rapid an effort to implement the program "[g]iven the many uncertainties about toxic pollution problems...." Id. at 1. Indeed, the GAO report recommended that Congress be advised that the deadline for implementing the pretreatment program cannot be met "until some significant problems and issues on toxic pollution are resolved." Id.

Another serious deficiency in the pretreatment program lies in the categorical standards' preclusion of the possibility for a variance based on consideration of the impact of a discharge on receiving water quality. One of the major purposes of the pretreatment provisions is to prevent the discharge of pollutants that pass through a municipal treatment works, since such untreated pollutants can affect receiving water quality. Conversely, if a pollutant is adequately treated by the works -- that is, the POTW is meeting its NPDES permit limits and is not violating water quality

requirements, and additional effluent reduction benefits as a result of pretreatment are minimal -- then these factors, among others, should be considered as grounds for a variance.

There are many other problems associated with the electroplating categorical standards promulgated by EPA, such as the fact that many of the limits are based on invalid data and secondary impacts have not been properly considered. I do not intend to consume time today on these more specific problems. The principal point is that the pretreatment program remains confused and fraught with problems, which only serves to exacerbate its impact on the electroplating industry.

Severe and Unnecessary Impacts on Industry from the Pretreatment Program. As stated earlier, the electroplating industry, to a large extent, is composed of small independent businesses with relatively little capital and small profit margins. Requiring these small and economically vulnerable job shops to comply with the electroplating pretreatment standards by January 1984 will require them to make substantial financial commitments immediately. Indeed, EPA's own estimates reveal that the standards are so costly and the job shops so economically vulnerable that the required compliance by January 1984 is likely to result in the closing of twenty percent of the job shop platers in the country.[28] Surviving shops can only continue to operate by bearing the burden

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[28] 44 Fed. Reg. 52594 (Sept. 7, 1979).

of approximately $1.5 billion in capital costs and nearly $500 million in annual operating costs imposed by the standards.[29]

This drastic economic impact is further exacerbated by the fact that EPA has not promulgated final standards for metal finishing -- a category that overlaps substantially with electroplating. Job shop platers operate in a highly competitive industry that is very price sensitive. EPA's purported economic analysis of the electroplating standards, while showing that twenty percent of the job shop platers might be forced to close as a result of the standards, fails to take into account the possibility that the surviving job shops would be impacted by business losses to metal finishing firms that currently are not facing a pretreatment standard deadline.

This drastic economic impact will not be mitigated by removal credits or Small Business Administration ("SBA") financial assistance, as suggested by EPA, since for practical purposes neither of these are available. As my earlier discussion of the confusion surrounding the pretreament program establishes, removal credits as a practical matter are not available. Even if new workable removal credit procedures were to be developed, those procedures must first be proposed for public comment and then EPA must consider the comments it receives. Only then can the agency promulgate new removal credit provisions in final form. Industries

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[29] Id. See pages 5-6 above.

cannot be certain that this procedure will result in final removal credit provisions by November of this year, which is only 14 months before the current effective date for the electroplating pretreatment standards.

Industry estimates are that a plant needs up to 30 months to complete the planning, purchasing, installation, and testing of pollution equipment, depending on the size and complexity of the plant. None of this can be accomplished with any certainty until specific discharge numbers to be obtained are known. Those numbers, or discharge limits, cannot be finally determined until removal credits are factored in. In view of all this, it is obvious that electroplaters will not have sufficient lead time in order to meet the January 1984 deadline taking into account removal credits. The GAO Report recently confirmed this conclusion:

> We believe it is highly unlikely that the [pretreatment] program can be fully implemented within the currently established time frames. Although EPA is conducting a regulatory impact analysis of the pretreatment program, the time frame for completing the analysis and selecting an option is very ambitious. Given the many uncertainties about toxic pollution problems, we are concerned about EPA's ability to resolve these issues in the relatively short time established.

GAO Report, supra, at 1. Moreover, industry cannot now predict which POTWs will apply for and receive removal credits after EPA's regulations are adopted in final form. Even if EPA promulgates final removal credit provisions by early 1983,

that would not protect electroplaters from substantial expenditures to prepare for pretreatment equipment and procedures that probably will be determined to be unnecessary.

Moreover, job shop platers are small businesses without a staff of environmental engineers on hand to plan, construct, and install needed equipment. For the vast majority of effective facilities, the nature of pretreatment equipment must be determined by a consulting engineer for each electroplating facility. The large number of electroplating facilities affected by the rules makes delays in the supply of certain pretreatment parts likely.

In addition, even the initial plant assessment phase of compliance with the pretreatment standards would involve in-plant process changes that require significant capital expenses. Most electroplaters have not conducted the design and engineering studies involved in the first stage of preparing to meet the standards, for several reasons. First, substantial removal credits simply will not be available to POTWs for substances discharged by electroplaters before the relevant design and engineering studies must be made. As (AMSA) and its individual members made clear in numerous conferences, the removal credit provisions in the general pretreatment rules were too cumbersome for POTWs to use. POTWs do not plan to grant removal allowances under suspended removal

credit regulations because they are too complex, cumbersome, and unworkable.[30]

In fact, many of the POTWs to which NAMF's members discharge their wastes have advised them to delay, until the removal credit problem is solved, the engineering design as well as equipment purchasing stages of preparing to comply with the general pretreatment rules. Engineering designs, after all, depend on the equipment that must be installed, and that in turn depends on the level of control that is required in light of available removal credits.

Finally, the prospect of SBA financial assistance as somehow mitigating the severe costs of the pretreatment standards is an illusory one. Nearly all electroplating facilities or small businesses have limited access to capital

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[30] As the GAO recently observed:

> Many POTW officials are critical of the removal allowance provisions [of the general pretreatment rules]. Several POTW officials have stated that the removal allowance [i.e., credit] provisions are unworkable, especially for large municipal systems. This opinion was frequently shared by the municipalities and POTWs we visited. Only one of these POTWs plan to grant removal allowances, although two others indicated that some allowances might be granted in the future. Officials at the other POTWs told us that they do not plan to grant removal allowances because calculating and awarding the allowances was too complex.

GAO Report, supra, at 10. See also Oversight Report, supra, at 59.

and, therefore, unusual financing problems. Loans guaranteed by the SBA, on which many electroplaters would have to rely when purchasing the equipment required to meet pretreatment standards, require extensive applications and are processed slowly. Moreover, SBA funds are currently very limited and virtually unavailable.

Lack of Benefit from Categorical Standards. At the outset, it is clear that much progress has already been made to date with national standards. The electroplating/metal finishing industry has already reduced its discharges by nearly seventy-five percent and will continue to do so through the implementation of local programs without the need for national categorical standards. For example, total toxic metals discharges to POTWs per year for metal finishing/electroplating have been reduced from 120 million to 32 million pounds per year, a reduction of over seventy-three percent. JRB Report, supra, at Table 1-1. These reductions will continue as a result of local programs even if national categorical standards are not put into effect.

In any event, the application of national categorical standards will result in no appreciable reduction in water quality violations where they exist. Table 3-1 of the JRB Report is quite revealing here. It shows that a full pretreatment program would reduce the number of violations by a very small degree. According to the JRB Report, the reason is

that, even with industry pretreatment, the remaining pollutant levels contributed by other sources (not regulated by the pretreatment program) are still high enough to cause the water quality criteria to be exceeded. Id. at 3-6. Because POTWs receive pollutants from domestic users, rain fall runoff as well as industrial users not subject to EPA's national standards, it is unrealistic to assume that the implementation of the current pretreatment program will properly address the problems that might exist.

Finally, as noted earlier, any problems that might exist regarding water quality or sludge disposal are site-specific rather than nationwide. Id. at 4-1. Since such problems must be dealt with by site-specific solutions, uniform national standards are neither effective nor necessary measures to deal with these problems.

As the foregoing discussion confirms, there is a need for reform of the pretreatment program. Such reform can best be accomplished through legislative change.

A PROPOSAL FOR LEGISLATIVE CHANGE

NAMF believes now is the opportune time for Congress to make changes in the existing pretreatment program, and we strongly support proposed amendments that allow the development of local pretreatment programs. Certainly for our industry, the timing is critical in view of its January 1984 deadline.

Rather than imposing national pretreatment standards across the board from which each source must seek a variance at the local level, Congress should permit the development of local pretreatment programs where municipalities have the administrative and technical capability and legal authority to operate such a program. This approach is consistent with the objectives of the Administration and organizations such as AMSA, although we recognize there are differences of opinion on the criteria to be used for determining whether or not a POTW will be authorized to develop a program. Moreover, as discussed earlier, the local approach is soundly supported by the Oversight Report, the JRB Report, and most recently the GAO Report.

NAMF endorses the concept of local control and increased flexibility in the pretreatment program, and we commend EPA for the positive step forward in recognizing the need for legislative change. We believe that it is the ultimate responsibility of a POTW to address the problems confronting its treatment system. Each POTW is required to obtain from EPA (or an approved state) an NPDES permit. That permit ensures that the POTW obtains certain treatment levels and meets water quality standards. Therefore, the POTW is in the best position to impose pretreatment standards in order to meet its compliance requirements and protect the integrity of

its treatment system. Each treatment system has unique problems, as do individual metal finishing firms, to address from a technical, environmental, administrative, and economic perspective. Rigid national categorical standards leave no flexibility in regard to those differing situations.

The issue of sludge contamination is sometimes associated with the need to develop a pretreatment program. We are not aware of any evidence that a significant number of municipalities are facing unmanageable sludge disposal problems due to industrial contamination. We believe that EPA's concern is directed at a problem that is best handled locally. Where sludge contamination does exist, it is often due to non-industrial sources that cannot be readily controlled. A New York study several years ago, for example, showed that eighty to ninety percent of metals in that City's treatment system was due to non-industrial sources such as domestic users and runoff from city streets.[31] Industrial pretreatment will have little or no beneficial impact in reducing sludge contamination in such cases. We believe that EPA and Congress must reexamine the relationship between sludge disposal problems and industrial pretreatment regulations.

NAMF also belives that Congress must reexamine the broader question of the intended structure and basis for the

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[31] Klein, et al., "Sources of Metals in New York City Wastewater," 46 Journal WPCF 2653 (Dec. 1974).

pretreatment program. As discussed earlier, EPA's general pretreatment program has been the subject of considerable controversy. Both industrial users and municipal sanitary districts have urged that EPA develop a program that is principally designed to prevent interference and pass-through (including compliance with the POTW's NPDES permit and water quality standards) that would avoid redundant treatment, and that would be largely implemented at the local level. The basic elements of such a program seem to be consistent with the legislative history of Section 307 as adopted by the Congress in 1972 and as amended in 1977.

In fact, the pretreatment program that has been developed by EPA is far more extensive than appears to be necessary. EPA has, in essence, said that there shall be national pretreatment standards applicable to all industrial users at "best available technology" levels. In establishing the industry standards, essentially no consideration is given to the amount of interference or pass-through in particular municipalities. No consideration is given to the extent to which municipal treatment systems effectively remove a particular pollutant on a consistent basis, or the extent to which municipal treatment systems have been satisfactorily enforcing less stringent local programs without experiencing any significant problems. Although EPA's general pretreatment regulations, in theory, provide for the granting of removal credits

reflecting consistent removal by a municipal treatment system, these regulations, as we discussed, are fraught with problems and confusion.

Thus, a fundamental question is raised as to whether or not a national technology-forcing program of the kind that EPA has developed is necessary and appropriate in every local setting to meet the goal of improving the quality of our nation's waters. The current approach has assumed that a strict BAT-based federal program should be established whether or not pretreatment is necessary, and then has unsuccessfully attempted to adopt some ameliorating features such as the program for variances and removal credits. We have the same problem with EPA's proposed legislation, which would retain categorical standards and add another cumbersome new waiver procedure. Thus, it fails to address the basic flaws in the current program.

We recognize there may be instances where a local POTW is either unable or chooses not to develop a local program. Certainly, in those instances, there needs to be some type of federal presence and perhaps federal standards are the proper vehicle. However, we submit that where the local POTW has the authority, expertise and desire, a locally developed pretreatment program is the most effective means for addressing water quality goals.

Such local programs can be developed on a case-by-case basis taking into account such factors as the number and

nature of indirect discharges and the individual histories of permit violations. As long as a POTW is in compliance or on a schedule to comply with effluent limitation requirements and the discharge from the POTW does not violate water quality standards, then that POTW should have the ability to develop and enforce a pretreatment program in lieu of categorical standards. Right now, such an opportunity does not exist in spite of the expertise of many POTWs.

We submit that this local approach is what is needed in the way of a pretreatment program. EPA's general regulations would assure that there were no sludge disposal problems and that the municipalities comply with their NDPES permits, which contain both technology and water quality based requirements. This would allow the pretreatment program to be based on local conditions and would be consistent with the congressional objectives of encouraging state programs, reducing federal involvement to a minimum, and avoiding redundant treatment. It would also emphasize treatment necessary to meet water quality requirements and not treatment for its own sake.

We believe that the pretreatment program would be far more successful and cost-effective if developed on a local level. Congress has recently funded the POTW construction grant program, a program that is sound. Centralized local municipal waste treatment makes sense from an environmental, technical, and economic viewpoint. However, we believe that it is folly to spend these billions of dollars on municipal

systems and then ask industry to spend billions more in redundant private treatment systems absent a local need for more treatment of specific wastes.

A targeted, local approach is the most cost-effective option. "Regulation of the POTW provides the opportunity for the POTW to meet its effluent limitations (whether water quality-based or technology-based) in the most cost-effective manner." JRB Report, supra, at 4-5. To put the matter quite simply, a targeted program applies resources to resolve a problem. An targeted program applies resources even where there is no problem. For example, if a particular POTW has high levels of cadmium in its effluent or its sludge, then a local approach should be implemented to eliminate that particular cadmium problem in the most cost-effective manner. If there is no problem at a particular POTW, which appears to be the case with the majority of POTWs in the country, then there is no need for any national or local pretreatment standards.

The basic ingredients for the approval of local pretreatment programs are already in place through EPA's general pretreatment programs. With this in effect there is no need for automatic, rigid national standards. Under the local control concept, such standards could always be imposed as necessary.

In conclusion, let me say that our commitment to a clean environment is as strong as our commitment to the overall success of the industry. We know that we cannot have one without the other.

I appreciate this opportunity to present our concerns with the pretreatment program and will be happy to answer any questions or provide any additional information the Committee may desire.

TESTIMONY OF

FRANCES DUBROWSKI

Mr. Chairman and members of the Subcommittee, it is a pleasure to be invited to testify here today. The subject you are considering, the national pretreatment program, is of vital concern to us. It is one of the Clean Water Act's most important programs for controlling toxic pollutants.

More than half, or 60,000 of the nation's industrial polluters dump their wastewaters in municipal sewage treatment plants. Because these facilities generate the same toxic pollutants as their counterparts who discharge directly, they dump a substantial volume of toxic material -- at least 246 million pounds of toxic pollutants each year -- in municipal sewage treatment plants.

EPA studies reveal that at least 93 chemicals, including such well-known toxics as lead, mercury, cyanide, and arsenic have been found in the wastes entering those plants. (Table I of these comments describes the adverse health effects of some of the more well-known toxics detected in POTW effluent samples.)

Toxic wastes cause three alarming problems in municipal plants. First, community plants are designed to treat conventional pollutants, not toxics. Toxics often pass through the plant, causing the same health and environmental damage as if they were dumped directly into a waterway.

Second, toxic wastes can destroy a community's huge investment in a sewage treatment plant. They can interfere with a plant's sensitive biological processes, impairing treatment of industrial wastes as well as the much greater volume of community wastewaters. They can affect the structural integrity of the

plant, corroding pipes and other equipment. They can expose municipal workers to highly toxic fumes, producing nausea; dizziness; and eye, nose and throat, and skin irritation. In extreme cases, they have exploded the treatment works and its sewer system.

Louisville, Kentucky is a prime example. In 1977, the huge plant there was knocked out of operation by two chemicals discharged into the sewers. About 100 million gallons of raw sewage were discharged into the Ohio River every day until the cleanup costing millions was completed. A few years later a discharge of industrial hexane caused a series of underground explosions, injuring four people and damaging an estimated $10 million worth of private property surrounding the plant.

Finally, toxic chemicals concentrate in the sludge wastes produced by a treatment facility. Contaminated sludge is more expensive to dispose of, especially the large volumes generated by municipal plants. If improperly disposed of, the chemicals in the sludge will seep out into groundwaterand drinking water supplies, permeate the soil where they can be taken up into the plants we eat, or become air pollutants when the sludge is incinerated.

For these reasons, Congress enacted a national program requiring pretreatment of industrial wastes before they enter municipal plants.

We believe that the pretreatment program is already quite flexible; that it relies upon federal regulation only where federal regulation is essential; and that it leaves substantial

discretion to state and local governments.

To begin with, federal regulations target only the biggest polluters; regulation of all but the most significant municipal and industrial sources is left to the discretion of state and local governments. For example, of the 15,250 publicly-owned treatment plants nationwide, only 2,000 need to develop a pretreatment program under current federal regulations. These 2,000 POTWs, however, present the most serious pollution problems; they handle approximately 91% of the nation's industrial flow to sewers.

Even within these 2,000 POTWs, federal regulations target only the biggest and dirtiest industrial contributors. They deal with only 34 major industrial categories known to discharge substantial amounts of toxic pollutants. Forty percent of the flow from industrial sources will not be covered by national categorical pretreatment standards; specific pretreatment standards, if any, for these sources are left to the discretion of local governments.

Second, Congress sharply pared the federal role in this program, preserving a strong role for local government. Local officials are responsible for protecting the plant from the hazard of fire, explosion, or other structural damage. They are also responsible for protecting local water quality and sludge content. To assure that they have adequate capacity to do so, they must adhere to certain general regulations covering the framework of their program. They must, for example, conduct an industrial waste survey to ascertain the volume and

characteristics of their incoming wastes. They must have certain monitoring and enforcement capabilities. These general regulations represent the bare minimum of a coherent program. The independent contractors responsible for EPA's regulatory impact analysis of pretreatment deemed them so "minimal and flexible" that other regulatory alternatives were not worth studying.

The one major requirement placed upon local governments is that they must enforce nationally developed categorical pretreatment standards for major industries. But these standards, as noted earlier, cover only a portion of the industrial flow to the nation's sewers. And they are subject to a local option. To avoid "treatment for treatment's sake", industry can obtain relaxations of the standards ("removal credits") to the extent they can demonstrate that the POTW actually achieves incidental removal of toxic pollutants.

Despite Congress' determination to regulate no more than necessary, the pretreatment program has come in for major criticism during this reauthorization debate. The reason is obvious: the program has now reached a critical turning point. Although only nine percent of the POTWs which need pretreatment programs have applied for or received federal approval, EPA estimates that 79% have made "substantial progress" toward this goal. All are required to complete their program by July 1, 1983, and many have signed compliance schedules with EPA or federal courts obligating them to do so.

In addition, several recent court orders restrict EPA's

ability to stall this program any further. For example, although EPA has issued only four of the necessary national categorical pretreatment standards, a court order, the NRDC Consent Decree, requires EPA to issue the remainder at specified intervals between now and May 1983. And the U.S. Court of Appeals for the Third Circuit recently invalidated EPA's attempt to remove portions of the general pretreatment regulations already on the books. (NRDC v. EPA, No. 81-2068, July 8, 1982).

In other words, after a decade of data-gathering and bureaucratic foot-dragging, the program is about to accomplish its goals. To industries and municipalities which have resisted progress to this point, this reauthorization represents one last chance to get out from under their impending pollution control obligations.

EPA has now presented Congress with a bill that would sharply reverse the direction of the pretreatment program. EPA would rewrite the law to have EPA replace Congress as the architect of the program. EPA would then be free to decide which if any of the major toxics-generating industries should be subject to national technology-based standards, when, if ever, such standards, should be issued, and how strict the standards would be. Specifically, EPA's bill would:

1. Eliminate EPA's obligation to establish national categorical pretreatment standards for the 30 major industrial categories that do not yet have standards. Instead, EPA would be free to decide which, if any, of these industries should be subject to uniform national standards.

2. Eliminate EPA's obligation to enforce the four existing categorical pretreatment standards. EPA would be free to modify or rescind the standards if the Administrator determined they were "no longer necessary or reasonable". (EPA's bill proffers no guidelines as to what might be "necessary or reasonable", inviting Congress to refrain from establishing any.)

3. Eliminate all deadlines for EPA decision-making on the categorical standards. EPA could issue standards, if any, when it so chose.

4. Eliminate EPA's obligation to update federal pretreatment standards as new pollution control technology is discovered. This, too, would become discretionary with EPA.

5. Eliminate Congressional dictates on how strict federal standards need be. EPA would no longer be required to "prevent" interference, pass through, or sludge contamination; it would merely have to address these problems. EPA would no longer have to maintain a parity between the pollution control obligations of direct and indirect dischargers; it would merely have to "consider" the same factors in its standard-setting decisions.

6. Finally, and most troubling of all, EPA would be able to grant both industries and municipalities broad exemptions from the law.

Municipalities would no longer have to meet Section 402(b)(8) which requires them to:

* identify the character and volume of their incoming wastes,

* assure that each major industrial user complies with

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the national categorical pretreatment standards, and

* require that the POTW be notified of any changes in the volume or character of pollutants entering the POTW.

Industries could be given carte blanche to violate national categorical pretreatment standards if the POTW merely certified adherence to a set of conditions that are totally ineffective for the control of toxic pollutants.

To cushion the blow from these exemptions, EPA purports to create a safety net for control of toxic pollutants. The principal elements of this safety net are:

1. compliance with effluent limits based on secondary treatment;

2. compliance with sludge guidelines under Section 405 of the Act; and

3. effluent limits based on water quality standards for toxic pollutants (regardless of how strict or lenient these standards may be).*

This safety net is nothing more than a collection of gaping holes in the toxic protections available to the public. First, secondary treatment is designed to control conventional, not toxic pollutants. Few POTWs even have toxic effluent limits in their NPDES permits.

EPA will claim that secondary treatment nevertheless accomplishes a degree of toxic pollutant removal -- on the order of 70%. This is only sometimes true. To reach removal

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* The POTW must also have adequate resources and enforcement authority to prevent structural impairment of the plant itself.

efficiencies of even moderate success (direct dischargers, by comparison, can accomplish removal efficiencies of 90% or more), EPA had to rely on data from only "well-operated" plants. These plants are not representative of the POTW population nationwide.

Even so, the level of removal varied widely from plant to plant and, among plants, from pollutant to pollutant. Table 2 of these comments illustrates median removals and passthrough rates of several priority pollutants for all POTWs studied by EPA. Nickel, for example, was removed with only 32% efficiency; mercury, arsenic, and cadmium with roughly 50% efficiency. In sum, POTWs do not do a uniform or even adequate job of removing toxic pollutants.

Removal rates alone do not tell the full tale. POTWs experience an extraordinarily high level of upsets and bypasses. When this occurs, raw toxic industrial wastes are discharged to receiving streams, a fact that argues for caution in relegating treatment responsibility for toxic pollutants to the POTW instead of the industrial source.

Even pollutants "removed" by a POTW are not necessarily safely disposed of. EPA's RIA admits: "Virtually all of the metal priority pollutants removed by the POTW accumulated in the resulting sludge streams." 56 million pounds of toxic metals are dumped in POTWs each year. Virtually all of this material is reaching our nation's waterways or municipal sludge disposal sites.

Finally, the wastestream to the POTW is highly diluted by community wastewaters. Toxic pollutants may be present below the

limit of detection (and thus present no apparent pollution hazard) but may concentrate in the sludge stream. Arsenic, for example, was detected in EPA studies in only 15% of the influent samples; it nevertheless appeared in 94% of all sludge streams.

This problem is compounded by the fact that EPA has never issued the comprehensive 405 sludge guidelines required by Congress.* In fact, development of these guidelines has been so far delayed that EPA has not even set a promulgation deadline.

Thus, EPA's safety net comes down to effluent limits. But EPA's effluent limits condition is so vague as to be meaningless. For example:.

* When must the limits be in place? EPA's proposal merely says that a POTW must make a commitment to establish limits; it does not set any deadline when the limits must be in place. This omission is important because few states have water quality standards for toxic pollutants. Therefore, most POTWs will want to take advantage of the "commitment" option. But substantial damage to water quality could occur while effluent limits are being developed.

* How must the effluent limits be attained? EPA's bill would allow a POTW to meet the limits either through pretreatment at the industrial site or advanced wastewater treatment at the POTW. If a POTW chose the latter option, enormous strains would

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* "Interim final" guidelines have been issued for land disposal of a few pollutants, but most of the 129 priority pollutants, and other sludge disposal options (such as marketing and distribution as fertilizer or soil conditioner) have yet to be addressed.

be put on the construction grants program. If funds were not available, the POTW might seek a deadline extension until 1988, and toxic pollution control would be postponed accordingly.

* When must the limits be met? EPA's proposal places no constraints on the length of any schedule for attaining the limits.

* What must the effluent limits accomplish? EPA merely says they must exist; it does not say they must meet any particular level of stringency. The proposal could, of course, be redrafted to require that the effluent limits be at least sufficient to protect water quality. But even with this modification, troubling questions persist. EPA is currently planning to encourage widespread downgrading of designated uses. Thus, at the very time that EPA is advancing this "condition" as an essential element of its safety net, EPA is simultaneously pursuing administrative measures to weaken its effectiveness.

Aside from these obvious limitations, EPA's proposal is based on two faulty assumptions: that EPA can be trusted, without Congressional supervision, to control toxic pollutants from industrial sources; and that local POTWs have proven their ability to manage pretreatment programs without federal regulation. Neither assumption withstands analysis.

1. Can Congress trust EPA?

The history of the pretreatment program is hardly designed to give Congress or the public confidence in EPA's willingness to move forward with strong controls on toxic pollutants. This

Committee has already gone on record criticizing the slow pace of EPA decision-making:

> The committee is concerned with the pace at which the Agency has acted to establish pretreatment requirements for industrial users of municipal waste treatment facilites. This failure on the part of the Administrator has resulted in the construction by communities of waste treatment facilities which have no capability to handle industrial waste separately, and thus many industrial wastes are either interfering with waste treatment processes, passing through facilites without treatment, or contaminating the sludge of those facilities. It is essential that the Administrator establish pretreatment regulations for these kinds of pollutants.

Senate Report No. 95-370, 95th Cong., 1st Sess. 58 (1977).

The courts have expressed similar frustrations. Recently Judge Flannery of the U.S. District Court for the District of Columbia refused to grant EPA's request for further extensions of the court-imposed -- and repeatedly extended -- deadlines for setting pretreatment standards. Instead, he required the agency to complete its rulemaking at specified intervals over the course of the next year. And just this month the U.S. Court of Appeals for the Third Circuit reversed EPA's attempt to postpone the effectiveness of general pretreatment regulations because EPA, acting solely at the request of industry, failed to provide the public with even minimal opportunity for input into EPA's decision. The Court held that EPA's failure to comply with fundamental Congressional requirements for agency decision-making necessitated more exacting scrutiny than agencies normally receive from the courts.

In view of this background, it defies common sense to eliminate the Congressional deadlines and standards which guide

both EPA's action and judicial review of that action.

2. How adequate would local pretreatment programs be in the absence of federal regulation?

EPA's own regulatory impact analysis (RIA) belies EPA's contention that local government has proven its ability to handle pretreatment in the absence of federal regulation. The RIA shows that local regulation of big industrial contributors to municipal sewage treatment plants has been nothing short of dismal. Only 25% of the POTWs studied by EPA have the essential elements of a program to control industrial wastes in place -- a sewer-use ordinance, a permit mechanism, and a monitoring and enforcement program. 36% of the plants have not even done an industrial waste survey to identify the volume and toxicity of incoming wastes. Without this information, they are not prepared to protect the plant itself, much less sludge or water quality.

Even where POTWs have adequate pretreatment standards, they are not necessarily able to implement them. 66% of the POTWs do not monitor for incoming heavy metals; 69% fail to monitor for incoming toxic organics. Many are aware of problems caused by industrial dischargers; they attribute upsets, bypasses and sludge contamination to industrial users, but they are unable to identify the source. 30% have no quantitative knowledge of the quality of their sludge.

To the extent that any controls at all are in place, they are largely the result of federal pressure. When asked why they had a pretreatment program, 38% of the local officials EPA surveyed identified federal pressure as their primary motivation.

Congress is now being asked to reduce this incentive less than a year from the date when the major components of pretreatment -- local programs and national categorical standards -- must be in place. Instead, Congress is being urged to shift to an approach that may take years to implement. The environmental price tag for this shift will be millions of pounds of toxic metals and organics in our waters each year. We strongly oppose this proposal and urge the Committee to reject it.

TABLE I

SUMMARY OF ADVERSE EFFECTS OF SELECTED TOXIC POLLUTANTS IN POTW EFFLUENT

Chemical	Carcino-genicity	Muta-genicity	Terato-genicity	Other Reproductive Toxicity	Neuro-toxicity	Toxicity to Other Organ Systems
Arsenic	+	+	+	+	+	+ skin
Benzene	+	+	+	+	+	+ blood
DEHP		+	+			
Cadmium	+	+	+	+		+ lung, kidney, (liver)
Carbon Tetrachloride	+	+		+	+	+ liver, kidney, eye
Chloroform	+		+	+	+	+ liver, kidney, skin, heart, blood
2-Chloro-phenol	+					
Chromium	+	+	+			+ skin, kidney, liver, respir-atory tract
Dibutyl Phthalate			+	+		+ blood
2,4-Dichloro-phenol	+	+				+ liver
Lead	+	+	+	+	+	+ kidney, blood
Mercury	+	+	+	+	+	+ kidney
Methylene Chloride			+		+	+ liver, kidney cardiovascular system
Nickel	+	+		+		+ liver, skin
Phenol	+			+	+	+ liver, kidney
Tetra-chloroethylene	+	+	+	+	+	+ liver, kidney
1,1,1-Trichloro-ethane		+				+ liver, kidney, cardiovascular system
1,1,2-Trichloro-ethane	+				+	+ liver, kidney, lung
Trichloro-ethylene	+	+			+	+ liver, skin, kidney
2,4,6-Trichloro-phenol	+	+				
Vinyl Chloride	+	+	+		+	+ liver, kidney

TABLE II

MEDIAN REMOVALS AND PASSTHROUGH OF PRIORITY POLLUTANT IN POTWs

	Secondary Treatment		Advanced Wastewater Treatment*	
Pollutant	Median Percent Removal	Median Passthrough	Median Percent Removal from Secondary Effluent	Median Passthrough
Metals				
Antimony	56%	44%	ID	--
Arsenic	50	50	ID	--
Cadmium	50	50	ID	--
Chromium	70	30	26	74
Copper	82	18	0	100
Cyanide	59	41	0	100
Lead	57	43	0	100
Mercury	51	49	25	75
Nickel	32	68	11	89
Silver	70	30	ID	--
Zinc	75	25	14	86
Volatiles	81	19	33	67
Acid Extracts	97	3	25	75
Base-Neutral	64	36	0	100
Conventionals				
BOD	90	10	62	38
TSS	91	9	41	59
COD	81	19	17	83
Oil & Grease	84	16	15	85
Total Phenols	73	27	63	37

ID = insufficient data

*Based on seven plants with a variety of treatment

STATEMENT OF

MONTE THRODAHL
SENIOR VICE PRESIDENT
MONSANTO CHEMICAL COMPANY

EXECUTIVE SUMMARY

The Chemical Manufacturers Association (CMA) believes that the country has made considerable progress in water pollution control through implementation of the Clean Water Act in a reasonable and flexible manner. In order to continue this progress, CMA urges Congress to examine how the Act can be improved by directing attention to significant problems and ensuring that the Act addresses them in a sound manner. CMA emphasizes the following key areas:

-- Modification of BAT limitations. The treatment technology installed by industry to date has resulted in substantial improvements in our nation's waters. Consequently, uniform implementation of BAT controls is not necessary. To avoid costly expenditures by industry for treatment technology that is not needed, modifications of BAT limitations should be allowed where BAT is not necessary to achieve good water quality.

-- Pretreatment. The pretreatment program has centered on national technology-based standards that do not properly take into account the need for such treatment. The result is costly, redundant treatment by both industry and POTWs. EPA has recognized the need for more flexibility in the pretreatment program. CMA supports a legislative amendment to allow the POTWs to establish local pretreatment requirements, as needed to meet their NPDES permit requirements, rather than relying on national categorical pretreatment standards.

-- Enforcement. CMA supports the imposition of criminal penalties for "midnight dumpers." However, the felony sanction provisions in the EPA bill go far beyond the circumstance that we believe EPA intended to reach. CMA is aware of no sound basis for broadly increasing the criminal penalties under the Act. Further, the administrative civil penalties proposed in the EPA bill are not warranted. Finally, CMA urges that the Act be amended to give the states sole authority to enforce state-issued NPDES permits.

-- Technology-based effluent limitations guidelines. EPA should undertake a study to assess the effectiveness of BPT technology ir improving water quality. The requirements for BAT controls should be refined to focus on definable problems. EPA should set BAT limits only where a significant toxics problem remains after installation of BPT controls, taking into account the costs of compliance. Compliance with BAT deadlines should be extended to July 1, 1988, as EPA has proposed in Section 2 of its bill.

-- Issuance of NPDES permits. CMA supports the issuance of permits for a fixed term of up to ten years, as provided in Section 12 of the EPA bill. We also urge that approved states be given more flexibility to run their own programs. The limitations on EPA's authority to veto state-proposed permits should be clarified.

-- The NRDC consent decree. EPA's implementation of the Clean Water Act is governed in large part by a settlement agreement in a suit between EPA and five environmental groups led by the Natural Resources Defense Council (NRDC). This agreement, embodied in a court order in 1976, has outlived its purpose. The 1977 Amendments to the CWA provide a regulatory framework for the control of toxic pollutants and give EPA discretion to implement these provisions. Section 6 of EPA's bill would provide any needed deadlines for the issuance of regulations. The consent decree should be abandoned.

-- Enactment of federal common law. Efforts to amend the Clean Water Act to authorize suits against dischargers for abatement or damages based on federal common law, rather than on the specific provisions of the Clean Water Act, should be rejected. The Courts are less capable than the Congress or EPA to develop and implement national environmental policy.

My name is Monte Throdahl. I am a Senior Vice President of the Monsanto Chemical Company. Today I am testifying on behalf of the Chemical Manufacturers Association (CMA) on the implementation of the Clean Water Act. CMA is a non-profit trade association whose company members represent more than 90 percent of the production capacity of basic industrial chemicals in this country. CMA members are directly and significantly affected by the requirements of the Clean Water Act (CWA), and we are thus vitally interested in the current review of the Act by Congress.

The installation of pollution control equipment by American industry, in many cases prior to the enactment of the Clean Water Act, has brought about major advances in cleaning up and protecting the nation's waters. Let me be specific as to the facts in the chemical industry. A recent study reporting on joint EPA/CMA analyses of samples from industry waste water treatment systems convincingly demonstrates that in-place biological treatment systems identified as best practicable technology (BPT) for the organic chemicals industry category provide a high level of removal of most organic priority pollutants.

We believe that much of the progress that has been made to date under the Act can be linked to the flexible and reasonable manner in which it has been implemented through the NPDES permit system. CMA urges Congress to take the occasion of the reauthorization to evaluate carefully the progress that

industry has made in the last ten years in water pollution control, and to assess to what extent additional controls on industrial discharges may be necessary and effective to achieve further improvements in water quality.[1]

Current policies under the Act should be examined to ensure that future requirements are imposed only where necessary and beneficial, taking into account costs of compliance. This will avoid devoting industrial capital to expensive but unnecessary treatment systems that do not provide commensurate water quality improvements. Where additional controls are needed, they should be developed in a way that directs the resources of EPA and industry at areas that really need attention. The CMA positions set forth in this testimony are consistent with or directly supported by the report of the House oversight subcommittee in December 1980.[2] That report discusses in detail significant problems with the Act's implementation and recommends amendments to the Act to address those problems.

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[1] Industrial installation of pollution control equipment has helped clean and protect our nation's waterways, and industrial wastewater discharges are no longer a major environmental stress. However, some areas for improvement remain. Major sources of water pollution, such as runoff from farms and urban areas, have not yet been effectively controlled. Many municipal dischargers have not yet achieved secondary treatment as mandated by the Act. More stringent controls on industry will not result in appreciable gains in water quality.

[2] As a result of hearings during the 96th Congress, the House of Representatives Subcommittee on Oversight and Review of the Committee on Public Works and Transportation issued a report on implementation of the Clean Water Act ("the House Oversight Report"). Committee Print 96-71, 96th Cong., 2d Sess. (December 1980).

I. MODIFICATIONS OF BAT LIMITATIONS

A central feature of the Act's control of the discharge of pollutants is the requirement that industrial dischargers to the nation's waters meet a series of increasingly stringent levels of technology-based effluent limitations. The 1972 amendments effected a shift from exclusive reliance on water quality controls to technology-based requirements. Although this reliance on technology may have been sound in 1972, after a decade of experience the time has come to evaluate whether the further application of technology-based effluent limitations will continue to improve water quality or instead will result in treatment for treatment's sake with no appreciable benefit to the quality of the nation's waters.

In the absence of effluent limitations guidelines, most of the first level of technology-based permits, namely BPT permits, have been developed on a case-by-case basis using the permit writer's best professional judgment. The record using this process has been a good one. For example, by 1976, the chemical industry had dedicated $1.8 billion for equipment, which cost $397 million a year to run. At the end of 1979, America's chemical companies had nearly doubled their investment in water pollution control to $3.2 billion. Nearly all (98%) of CMA member plants were in compliance with water pollution control requirements by mid-1977.

The treatment installed by industry to date has achieved measurable results in controlling priority (toxic)

pollutants. For example, the recently completed CMA/EPA Five-Plant Study demonstrates that well designed and well operated biological treatment systems are effective in removing organic priority pollutants.

The Five-Plant Study was structured to develop long-term data base on the removal of toxic organics by biological treatment systems, which are the systems used by over 80 percent of the chemical industry. An extensive quality control/quality assurance program was included to assure that the reliability of the analytical results could be defined so that proper interpretation of the data base could be made.[1] EPA nominated the five participants based upon the expected occurrences of specific organic priority pollutants. All of the organic priority pollutants previously identified by EPA as commonly occurring in this industry's wastewaters were covered by the study.

The following major conclusion was drawn, based upon the study results: Data collected during the five-plant study indicate that toxic organic pollutants in all groups (volatiles, base/neutral, and acid) are removed, with few exceptions, to the limit of detection.[2] Organic priority pollutants were removed

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[1] All samples were analyzed using gas chromatography/mass spectrometry (GC/MS) or gas chromatograph (GC) procedures (44 Fed. Reg. 69464, et seq. December 3, 1979) or variations acceptable to EPA's Effluent Guidelines Division.

[2] Our analysis demonstrates that analytical method precision and accuracy as measured by intralaboratory repeatability,

(footnote cont'd)

by 87 percent on the average. Thus, one can conclude that wastewater treatment systems installed to meet 1977 Clean Water Act requirements can substantially reduce those organic priority pollutants of concern within the industry.

Deputy Administrator Hernandez described the results from industrial controls under the Clean Water Act to this Committee on February 5, 1982. He estimated that "from 1972 to 1977 implementation of best practicable technology regulations. . . significantly reduced industrial discharges of six key pollutants: biochemical oxygen demand (BOD) by 69 percent; suspended solids by 80 percent; oil and grease by 71 percent; dissolved solids by 52 percent; phosphate by 74 percent and heavy metals by 75 percent." The EPA Journal (January 1980) also reports that the agency "has found more than 70 examples of clear-cut improvements in ambient water quality, from Hawaii to Maine, and from Alaska to Texas."

EPA is now about to begin the implementation of the second level of technology, namely BAT controls. CMA believes that the success achieved to date in improving water quality can best be continued if additional flexibility is allowed in the Act. We question whether the uniform requirement of full

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(footnote cont'd)

interlaboratory reproducibility and recovery of known spikes remain as the dominant limiting factor controlling the use of toxic organic pollutant data. For example, for a single laboratory, if a volatile organic pollutant were measured in a single sample as 100 ppb, a second analysis of that same sample could yield a result as low as 20 ppb or as high as 500 ppb.

additional BAT controls remains appropriate in view of the unanticipated significant reductions in discharges of pollutants to date and the substantial anticipated costs of BAT controls. In order to avoid the imposition of costly treatment requirements that are not necessary to protect the environment, we recommend that Congress amend the Clean Water Act to allow additional flexibility in the use of BAT effluent limitations. Where water quality or economic circumstances permit, a discharger should be allowed to qualify for alternative BAT effluent limitations.[1] In particular, the Act should be amended to allow for a modification of BAT effluent limitations where the applicant can show that the resulting discharge of pollutants will not pose an unacceptable risk of harm in the receiving water based on the water's designated use.

The BAT modification scheme that we propose would operate in a straight-forward manner, as follows:

1. Application for a modification would be made by the discharger, who would have the burden of proof.

2. The application would be acted on by the NPDES permit issuing agency -- by the state where there is delegation or (in the absence of delegation) by EPA.

3. The modification would be on a pollutant-by-pollutant basis from BAT effluent limits (that would otherwise be imposed based on EPA guidelines or best professional judgment).

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[1] Section 301(g) of the Act provides for a modification of the BAT limitations applicable to nonconventional pollutants where such modification will not interfere with the attainment or maintenance of water quality. Section 301(l) of the Act precludes such a waiver for toxic pollutants.

4. The discharger would have to show either that water quality standards are being met (or could be met with the application of additional controls short of BAT), or that its present or proposed discharge levels will not pose an unacceptable risk of harm in the receiving water based on the designated use of such water.

5. The permit writer would exercise judgment in evaluating the necessary data and the merits of modification requests in each particular case.

6. The permit writer may require additional monitoring (including biological testing) as a condition of granting the modification, as circumstances warrant.

7. A BAT modification would not relieve the discharger of any applicable BPT or water quality requirements.

The discharger would be able to make a case for a BAT modification in one of several ways. First of all, if a water quality standard exists for a pollutant that would otherwise be regulated by BAT, then the discharger could seek to establish that the standard is being met -- or could be met with the application of additional controls short of BAT. For example, if total maximum daily loads (TMDLs) have been established for the facility in question, then the applicant could show that the quantity of its discharge of a pollutant is less than the TMDL value. Alternatively, if no TMDL has been established the discharger could show, by analysis of samples from the water body in question, that the standard for the pollutant is being met.

In situations where a water quality standard has not yet been established for a pollutant of concern, a BAT modification would be appropriate where the applicant can show that its discharge will not pose an unacceptable risk of harm in the receiving water based on the designated use of such water. This showing could be made on the basis of biological monitoring, or by alternate means.[1] Safe levels could be established in several ways -- for example by biological studies, by using the acute level and a validated or agreed upon application factor, or by reference to the scientific literature.

It is neither necessary nor appropriate that the precise scientific requirements for a BAT modification be established in the statute. The permitting agencies should have flexibility to determine what data will be sufficient to establish the absence of an unacceptable risk of harm to the environment on a case-by-case basis. Knowledge of the discharge in question, the pollutants of concern, the nature of the receiving water body, potential affected aquatic organisms, and other relevant factors will enable the permitting authority to make sound judgments on the merits of a modification request. Similarly, the permitting authority is in the best position to determine the need for any other requirements, such as additional conventional or biological testing, that may be appropriate as a condition of granting the BAT modification.

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[1] See The House Oversight Report at 62.

The proposed BAT modification will provide a needed safety-valve. An adequate scientific showing will be required to obtain such a modification. The modification process can and should be administered in a manner that avoids protracted proceedings, paperwork and expense for all concerned, while assuring that the environment is protected.[1]

II. LOCAL CONTROL OF THE PRETREATMENT PROGRAM

The current program for regulating industrial dischargers to publicly owned treatment works (POTWs) consists of national technology-based pretreatment standards. However the mixture of industrial and other discharges to POTWs varies so widely that any problems that exist can better be controlled at the state and local level. The application of uniform EPA categorical pretreatment standards will result in no appreciable reduction of water quality violations, where they exist. The present program for national categorical standards should be replaced with one that places responsibility with local authorities.

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[1] Section 4 of EPA's bill would authorize the Administrator to prescribe processing fees for variance and exemption applications "as he/she deems appropriate." CMA does not object in principle to the payment of reasonable processing fees. We are concerned, however, with the unfettered discretion of the Administrator to determine the amount of such fees. Congress has determined that certain statutory modifications are appropriate under the Act. We see no more justification for imposing fees on these modification proceedings than for other proceedings under the Act. If Congress nonetheless decides to provide for such fees, they should not be set at a level that would discourage the filing of applications for such modifications.

Recognizing that certain industrial discharges can cause interference with the operation of POTWs or the pass-through of wastes that the POTW is not capable of treating, Section 307(b) of the Act authorizes EPA to establish national pretreatment standards. EPA has developed an elaborate and cumbersome pretreatment program to implement this provision. The most onerous aspect of this program involves the promulgation of national technology-based pretreatment standards applicable to industrial dischargers of toxic and nonconventional pollutants. Typically, these "categorical" pretreatment standards have been identical to effluent limitations guidelines applicable to direct dischargers. In the development of these standards, EPA has given no consideration to the amount of interference with the operation of POTWs, and no consideration to the extent to which municipal treatment systems effectively remove pollutants. Meeting such standards will therefore inevitably require expenditures by industry for treatment that substantially duplicates treatment by POTWs and is therefore unnecessary.

To alleviate this problem of redundant treatment, Congress in 1977 provided for modifications of national categorical pretreatment standards to reflect pollutant removals achieved by POTWs. EPA has attempted to implement this provision in regulations that provide for the granting of so-called "removal credits," but these regulations are viewed by

POTWs as so complex and restrictive as to preclude the granting of credits.[1] Without credits, industrial dischargers will be required to install expensive treatment technology to meet pretreatment limits even though the POTW may remove all or most of certain pollutants in the dischargers' effluents.[2]

We believe that the pretreatment program can be strengthened by directing attention to particular problems of interference and passthrough identified in Section 307(b) of the Act, and by placing principal responsibility for pretreatment requirements on the municipalities and states involved. A lengthy report prepared by EPA's contractor in 1981 concludes that such a targeted approach would be most effective.[3] The report contains these principal findings:

1. Much progress has already occurred without national categorical standards. Many POTWs have successfully

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[1] The House Oversight Report (at p. 42) quotes one municipal witness at the Subcommittee's hearings in June, 1980, as stating, "'The restrictions and difficulties involved in the granting of removal credits lead to the conclusion that the EPA was never serious about allowing removal credits to industry.'"

[2] Data from municipal treatment plant monitoring show that POTW secondary treatment is extremely effective at removing toxic organics. This is consistent with the five-plant study results discussed earlier.

[3] JRB Associates, Inc., "Assessment of the Impacts of Industrial Discharges on Publicly owned Treatment Works" (November 20, 1981).

implemented local programs for years. These programs have significantly improved the quality of the nation's waters.[1]

2. The problems that exist with respect to water quality or sludge disposal are site-specific and cannot readily be solved by uniform, national standards. As the JRB report notes: "upsets, bypass, interference and sludge contamination are site-specific problems with site-specific solutions." (at 4-1)[2]

3. The application of national categorical standards will result in no appreciable reduction in water quality violations, where they exist. According to the JRB report, 54 percent of the POTWs cause no water quality violations, 27 percent violate the criteria for one pollutant, and 19 percent

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[1] Table 1-1 of the JRB report illustrates this point. The volume of toxic metals discharged to POTWs has been reduced from 160 million to 56 million pounds per year, a two-thirds reduction. This information is based upon EPA Effluent Guidelines Division data that are probably at least one year old, and may be several years old. If this is the case, then actual progress to date is probably even greater than indicated in the JRB report.

[2] The problems and solutions are site-specific in terms of the pollutant(s) of concern, the source(s) of the pollutant(s), the nature of the concern (e.g., water quality, sludge use), and options for addressing the problem. In one case, for example, there might be a sludge use problem caused by cadmium; in another there might be a water quality problem due to a toxic organic. The problem might be caused by a particular plant or industry, or it might be due to domestic users or rainfall runoff. Even if a problem is caused by industrial users, they may or may not be within the 22 specific industry categories that would be subject to national categorical standards -- even if the full pretreatment program were developed by EPA. In most cases, the application of the national standards will miss the mark, being either too stringent or not sufficiently inclusive to do the job. See JRB report at 4-1.

violate the criteria for two pollutants. These violations should be addressed, but uniform application of national categorical standards will not eliminate them. The reported data indicate that only 61 POTWs (or 7 percent of the total with violations) would have exceedences eliminated after implementation of categorical standards.[1] (See Table 4-3 of the JRB report.)

4. A targeted, local approach is clearly the most cost-effective option, rather than categorical standards.

> Targeted options require control actions only where there are water quality problems, whereas options that are untargeted require control actions regardless of local environmental conditions. (JRB Report at 4-4)
>
> Regulation of the POTW provides the opportunity for the POTW to meet its effluent limitations (whether water quality based or technology based) in the most cost-effective manner. (Id. at 4-5)

These findings corroborate the recommendations of the House Oversight Report.[2]

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[1] Categorical standards would address only a portion of the pollutants entering POTWs. POTWs also receive pollutants from domestic users, rainfall runoff as well as industrial users not subject to the categorical standards. It is thus unrealistic to think that implementation of national categorical standards will fully address any problems that exist.

[2] The House Oversight Report (at p. 62) states that steps should be taken immediately to allow municipal treatment authorities to implement their own pretreatment programs, which would include the establishment of local pretreatment standards. The Report unequivocally recommends that the use of national categorical pretreatment standards be abandoned. CMA supports the recommendation of this report as to the need to reform the pretreatment program.

EPA has recognized the need for more flexibility in and local control of the pretreatment program. However we do not believe that EPA's bill accomplishes these objectives. It retains national categorical pretreatment standards and removal credits, instead of focusing on that level of treatment dictated by local conditions, and thereby makes redundant treatment and unnecessary expenditures by industry inevitable. Moreover, EPA's proposed amendments to Section 307 of the Clean Water Act would add (on top of the removal credit program) two entirely new waiver programs, the implementation of which would complicate an already unworkable program.

EPA's proposed amendments would allow for exemptions from national categorical standards if seven conditions are met. One such condition is that the POTW is currently and will continue to be in compliance with effluent limitations. Thus, industry could be denied an exemption if a POTW does not comply with its permit, even if such noncompliance is due to poor operation by the POTW, or involves pollutants not discharged by the industry in significant amounts, and would thus not be cured by pretreatment. Moreover, given the record of POTW compliance to date, we question how much relief this provision would afford.[1]

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[1] The second waiver proposed by EPA would exempt publicly-owned treatment works from the requirements of Section 402(b)(8) of the Act if eight conditions are met. This waiver would

(footnote cont'd)

The fundamental problem with the existing pretreatment program is that national categorical pretreatment standards are unnecessary, costly, and fail to address the problems of interference and passthrough that Congress properly focused on in establishing the pretreatment program. We urge the Congress to allow POTWs to establish local pretreatment requirements, enforceable through the permit program, rather than relying on national categorical standards.

III. CIVIL AND CRIMINAL PENALTIES

CMA supports the imposition of criminal penalties for "midnight dumpers." However, the felony sanction provisions in the EPA bill go far beyond the circumstance that we believe EPA intended to reach. CMA is aware of no sound basis for broadly expanding the criminal sanctions under the Act. Further, the administrative civil penalties proposed in the EPA bill are unwarranted. Finally, CMA urges that the Act be amended to give the states sole authority to enforce state-issued NPDES permits.

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presumably affect obligations under EPA's general pretreatment regulations. Procedures for obtaining this waiver seem equally complex and the waiver appears to provide little, if any, relief from the problems of the existing pretreatment program. CMA has not urged that the Act be amended to provide such relief.

A. EPA's Proposed Felony Sanctions Provisions Are Unjustifiably Broad

EPA proposes to increase the criminal penalties under the Clean Water Act, and create new criminal offenses. It is our understanding that the Administration is particularly concerned with "midnight dumpers" into POTW sewer systems. In examining areas where criminal sanctions may be critical to effective enforcement, one might properly focus on cases where toxic substances are discharged illegally without benefit of a permit or compliance with the procedures of a regulatory system.[1]

CMA supports the imposition of criminal penalties for midnight dumpers. However the felony sanction provisions in the EPA bill go far beyond the circumstances that EPA says it intends to reach. Midnight dumping can be dealt with in a precisely drawn provision. Apart from this problem, CMA submits that the existing penalty provisions are more than adequate to deal with offenses under the Act, especially in light of the high level of compliance by industry with the Act's requirements.

EPA's amendments, unlike other environmental statutes such as the Clean Air Act, would make first knowing offenses of

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[1] The other area would be to deal with cases of recidivism and bad faith in addressing recurring violations. Section 309(c)(1) of the CWA currently deals with this issue by increasing the penalties for a second conviction.

the Clean Water Act into felonies. We have heard no valid explanation for increasing the penalties for first offenses, particularly for violations of a complex technical statute such as the Clean Water Act. Because of the extensive and frequent monitoring that EPA requires, most offenses of the Act will be "knowing." Many of these offenses will be minor exceedances of effluent limitations or other technical violations. Indeed, when EPA promulgates effluent limitations guidelines, it chooses numerical limitations that it knows cannot be met by the regulated industry 100 percent of the time. Thus the Agency expects a certain number of violations to occur. The first conviction for such minor or technical violations should not be a felony, even though the violation may have been "knowing." Such technical violations should be dealt with on voluntary, informal basis; even if criminally prosecuted, they should be only misdemeanors.

To address the midnight dumping problem, the EPA bill would make it a criminal offense to discharge pollutants into a sewer system or POTW that cause or "may reasonably be anticipated to cause" personal injury or property damage or that cause the treatment works to violate its NPDES permit. CMA supports, as it has before, a provision to punish midnight dumpers, but believes that EPA's bill is vague and overbroad. First, the phrase "may reasonably be anticipated to cause" is vague. In a criminal statute, it is crucial that the entity

being regulated understands clearly what conduct is permitted and what is not; EPA's proposal does not provide such guidance. Moreover, the bill fails to define what is meant by a sewer system, creating even more ambiguity in the statute. Does the offense include discharges to a plant's own internal sewer system?

Second, although the bill creates an affirmative defense where the discharge of pollutants into a POTW was in compliance with all applicable requirements governing the discharge, the availability of the defense in many common situations is unclear. For example, is the discharge of a pollutant that is not regulated by a national or local standard a discharge that complies with applicable requirements? In addition, the affirmative defense unfairly shifts the burden to the regulated community to compensate for the fact that the offense is so ill-defined. Does the offense apply to all discharges into sewers or POTWs? Does it apply even to negligible or de minimis releases? We submit that the offense should exclude such trace discharges, as is the case in Section 311 of the Act.[1]

In summary, if a "midnight dumping" problem exists, EPA should propose a more carefully drawn provision which

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[1] CMA is also concerned with the definition of a "hazardous subtance" in EPA's bill. The definition is redundant since the term "pollutant" is already broadly defined by the Act. There is also great potential here for overlapping enforcement authority under the various statutes to which the definition refers. We believe that the definition should be deleted as unnecessary.

addresses that particular concern. Apart from this problem, absent a showing that EPA has been hamstrung in its enforcement under existing criminal provisions of the Act, we see no need for amending those provisions.

B. Administrative Penalties Are Unnecessary

CMA opposes EPA's proposal to add to the Clean Water Act an entirely new regime of administrative penalties. There is no demonstrated need for such penalties. Indeed, the record of industry compliance under the Act has been very good. Consequently, it is unclear what purposes, if any, EPA has in mind for such penalties under the Act.

The proposed administrative penalties raise substantial questions of fairness. The penalties would not be imposed by an impartial fact-finder. The bill provides that the alleged violator shall be given notice and an opportunity for a hearing, but the hearing if allowed will not be subject to the procedural protections of the Administrative Procedure Act. Although subsection (6) of the EPA bill gives EPA the authority to issue subpoenas for such hearings, the alleged violator is provided with no means for having such a subpoena issued to compel the production of witnesses or documents. It is entirely unclear what procedures and protections, if any, an alleged violator would have under EPA's bill.

Violations of the Clean Water Act are likely to be technical in nature and often unavoidable. For example, EPA's effluent limitations guidelines are designed by the Agency to

be achievable only 99 percent of the time. Violations can thus be expected to occur. Under the existing enforcement provisions of the Act, monetary penalties for such violations may be imposed only by a court. This requires enforcement personnel to consider carefully the merits of any particular case, and to make judgments about which alleged violations are sufficiently serious to pursue. When penalties can be assessed like traffic tickets, this incentive to exercise discretion and judgment is lost.

C. Allow States to Enforce State-Issued Permits

When the Administrator learns of a violation of a state-issued NPDES permit, Section 309(a) of the CWA gives him the option either of bringing an enforcement action directly against the violator, or allowing the state to commence an enforcement action within 30 days after notification by EPA to the alleged violator and the state. EPA should not be allowed to bring an enforcement action for permit violations occurring in states administering approved programs. States that have assumed exclusive responsibility for implementation of NPDES programs should be given sole enforcement responsibility. Modifying the enforcement authority in this manner will also alleviate the "double jeopardy" that dischargers now face of prosecution by both EPA and the state. EPA would, however, retain oversight responsibility and the authority to withdraw its delegation where appropriate.

IV. THE PROMULGATION OF NATIONAL TECHNOLOGY-BASED EFFLUENT LIMITATIONS GUIDELINES

In addition to allowing modifications to BAT limitations, Congress should further refine the effluent limitations guidelines program to ensure that additional, uniform technology requirements are imposed only where they will continue to improve water quality. To accomplish this, Congress should (1) direct EPA to undertake a study of the effectiveness of BPT in controlling discharges of toxic and nonconventional pollutants, (2) limit the effluent limitations guidelines program to situations where there is a significant toxics problem, and (3) establish more realistic deadlines for promulgation and implementation of technology-based guidelines.

A. Assessment of the Effectiveness of BPT in Controlling Discharges of Toxic and Nonconventional Pollutants

The House Oversight Report states (at pp. 29-30) that "[t]he latest information indicates that the 129 'priority pollutants' on which the clean water regulatory program is primarily focused are less evident in both amounts and concentrations than previously believed." The Oversight Subcommittee found (at p. 30) that "to a degree not anticipated, the conventional secondary treatment technologies employed by municipalities and many industries have succeeded in removing most of the priority pollutants in a highly efficient manner." The Report refers (at p. 35) to data showing that technology installed to meet BPT limits may be far more effective in

removing or degrading toxic pollutants than previously anticipated.

Before requiring industry to spend vast sums of money to install additional treatment equipment to meet more stringent BAT limits on nonconventional and toxic pollutants, Congress should direct EPA to undertake a study of the effectiveness of technology installed to meet BPT limits. Existing valid data should be compiled and analyzed, and new data generated where needed. The study should be initiated immediately and completed within one year. In addition, Congress should require the study to be updated periodically.

B. Reserve BAT Effluent Limitations Guidelines for Significant Toxics Problems and Significant Industry Subcategories

The task of developing best available technology (BAT) guidelines has proved to be very difficult. EPA has been unable to promulgate guidelines in a timely fashion, and current budget constraints will only hinder this task. It makes little sense to continue developing guidelines for a large number of industry subcategories.[1] Instead, EPA should

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[1] A recent statement by Assistant Administrator Eidsness illustrates this point:

> "Developing effluent limitations guidelines and standards for the Organic Chemicals/ Plastics and Synthetics (OCPS) manufacturing industry is the most extensive and technically challenging project undertaken by EPA pursuant to [the NRDC] Consent Decree. This industry is not only extremely large . . .

(footnote cont'd)

focus its efforts on developing guidelines where a significant toxics problem remains in a particular industry subcategory after the installation of best practicable treatment technology (BPT), and where there are a sufficient number of plants in the subcategory to justify nationally-applicable requirements. This involves scrutiny of which pollutants are toxic and when a discharge causes a significant problem. Situations not covered by guidelines can be handled by permits issued on a case-by-case basis using the permit writer's best professional judgment.

1. Classifying Pollutants as Toxic

In the 1977 Amendments to the CWA, Congress defined toxic pollutants in Section 307(a) by reference to the list negotiated by NRDC and EPA in NRDC v. Train, 8 E.R.C. 2120 (D.D.C. 1976).[1] Congress provided that EPA should revise that list from time to time "tak[ing] into account" certain specified criteria. Congress did not prescribe how the criteria should be weighted or, indeed, what it meant by taking the criteria "into account."

(footnote cont'd)

> but also exceptionally diverse. It produces over 20,000 products by using many different types of processes, raw materials and operating conditions."

Affidavit of Frederic A. Eidsness, Jr., Report Of The EPA Concerning A Schedule For Proposing And Promulgating Regulations (June 21, 1982), filed with the U.S. District Court in NRDC v. Gorsuch (D.D.C. Nos. 2153-73 et al.).

[1] See discussion of NRDC decree at pages 30-31 below.

To remedy this situation, EPA should be required to base its classification of a pollutant as toxic in water on substantial evidence that has been reviewed by an independent board of qualified individuals that supports a finding that a significant and unreasonable risk of exposure exists.[1] EPA should evaluate the severity of anticipated harm from a pollutant, the potential exposure of aquatic organisms, and the probability of harm occurring from exposure at various levels. The placement of pollutants on the toxics list should be based on a risk assessment which estimates the exposure of affected organisms to the pollutant of concern.[2]

EPA should also review the existing list of toxic pollutants and promulgate a new list based on the new criteria and risk assessments. Pollutants that do not satisfy the criteria should not remain on the toxics lists.

2. Defining a Significant Toxics Problem

EPA has not developed well-articulated priorities for regulating discharges. By attempting to address all

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[1] See discussion of peer review at pages 31-33 below. Moreover, the error in improperly designating a pollutant as toxic is compounded by virtue of the fact that the toxic pollutant list is referenced in other programs. See, for example, the Superfund legislation, Public Law 96-510, 42 U.S.C.A. § 9601(14)(A).

[2] The supporting evidence should consist of an evaluation of the available scientific and statistical data, weighted as to relevancy, validation, and significance. The Agency should consider both data supporting the toxics classification and data that are not supportive.

levels rather than significant discharges of toxic pollutants, EPA simply dilutes its resources.

The Act should make clear that under certain circumstances EPA may exclude from Section 304(b) effluent limitations guidelines either a specific point source category or specific pollutants that are discharged by plants in a category. Such circumstances should include, but not be limited to, situations where there are few sources within the category, where there are insufficient data to support a guideline, or where a pollutant is present in a discharge only in an insignificant amount.[1]

3. Reserve Best Professional Judgment BAT Permit Limits for Significant Toxics Problems

Under the policy proposed above, BAT limitations for toxics would be set by nationally-applicable guidelines only when there is a significant toxics problem and there are sufficient plants in a subcategory to warrant the promulgation of national guidelines. If no guidelines have been promulgated, BAT limits should be imposed in a permit on a case-by-case basis only where a plant's discharge causes a significant toxics problem. Such permit limits, like the nationally-applicable

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[1] In Section 101(a)(3) of the Act, Congress has set forth a policy to prohibit the discharge of toxic pollutants in toxic amounts.

effluent limitations guidelines, should be based on an evaluation of the statutory factors, including costs and benefits, treatment alternatives, and inter-media effects.

C. Extension for Compliance with BAT Limitations

Section 301 of the Act requires compliance by July 1, 1984, with BAT effluent limitations for toxic pollutants. This date has become unreasonable in light of the Agency's failure to promulgate effluent limitations guidelines for many industry subcategories and its inability to issue case-by-case permits to some 69,000 dischargers.[1]

Congress should extend the date for compliance with BAT limitations in order to allow EPA to complete its task of issuing regulations, and to provide sufficient time for industry to comply with NPDES permit requirements based on published effluent limitations guidelines, or (in the absence of regulations) the permit writer's best professional judgment. We support an extension of the deadline for compliance with BAT

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[1] The House Oversight Report notes (at p. 29) that then current problems besetting the Agency "call into grave question whether the EPA is truly capable of putting into effect a genuinely workable, legally defensible and cost-effective regulatory scheme with which industry and local government can reasonably be expected to comply within the statutory deadlines." Since then, the delays in promulgating effluent limitations guidelines have continued. The House Oversight Report (at p. 62) recommends that this reality "be recognized sooner rather than later," and that the date for compliance with BAT treatment requirements be extended to compensate for EPA's delay in issuing effluent limitations guidelines.

limitations to July 1, 1988, as EPA has proposed in Section 2 of its bill.[1]

V. THE ISSUANCE OF NPDES PERMITS

Sections 301 and 402 of the CWA provide that pollutants may not be discharged to waters of the United States except in compliance with a permit issued by EPA or an authorized state. Pursuant to those provisions, NPDES permits were issued to most industrial direct dischargers prior to 1977. These permits have expired or will soon expire and need to be reissued. Based on experience gained from the first round of permit issuance and an examination of problems that are likely to arise in the future, certain changes in the permitting process appear to be in order.

A. Limit EPA's Veto of State Permits

EPA should not be allowed to veto a permit proposed by an approved state on the basis of anything other than clear requirements of the Act or effluent guidelines regulations. By delegating the permit-issuing authority to the states, Congress intended to remove the federal government from that process to the extent possible.

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[1] Provision should also be made for an extension of the BAT compliance date on a case-by-case basis if a discharger can show that, despite its good faith efforts, compliance with the limitations by the prescribed date is not feasible.

EPA has asserted the right to object to state-proposed permits on a wide range of grounds, many of which appear to be unlawful and involve merely a substitution of the Agency's judgment for that of the state.[1] (40 C.F.R. § 123.75). For example EPA's regulations allow the Agency to object to any proposed effluent limitation which "in the judgment of the Regional Administrator" is improper, even in the absence of EPA effluent limitations guideline regulations. Id. § 123.75(c)(6). This means that the states never truly run their own programs. Every judgment of state officials is subject to review and reversal by EPA personnel.

EPA's failure to delegate meaningfully the NPDES permit program is criticized in the House Oversight Report (at p. 56), which urges EPA to "make every effort to ensure that these delegations of program authority are genuine." The law should be amended to make absolutely clear the limited scope of EPA's review once an NPDES program has been delegated to a state.[2]

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[1] Section 402(d) of the Act provides that EPA may veto a state-proposed permit only where the permit conditions are "outside the guidelines and requirements of [the] Act." Interpreting this section of the Act, courts have held that EPA cannot object to a state-proposed permit simply because it disagrees with the state. Nor can the Agency rely on informal guidance or memoranda as the basis for its objection. Ford Motor Co. v. EPA, 567 F.2d 661 (6th Cir. 1977).

[2] As a general matter, CMA is opposed to partial delegation to a state of authority to run an NPDES program. Such partial delegation will result in duplication of effort and administrative processes, disparate treatment of industries or firms in the same state, and is not sound from a policy perspective.

(footnote cont'd)

B. Extend the Life of NPDES Permit to Ten Years

The existing five-year maximum limit on the life of NPDES permits is unduly short. Because it often takes one year for a final permit to be issued, and up to three years to install treatment technology, the five-year limit leaves insufficient time to test the effectiveness of the treatment before the permit renewal application process begins. Further, where a permit has been issued on a case-by-case basis prior to the promulgation of guidelines, it should not be changed soon thereafter even to conform to subsequently issued guidelines. The permit program should be modified to allow for ten-year NPDES permits,[1] as provided in Section 12 of the EPA bill.

(footnote cont'd)

In certain limited circumstances, however, partial delegation may be appropriate. In particular, where unique state organizational and jurisdictional problems prevent full delegation of the NPDES program, partial delegation could be allowed. We understand that divisions of environmental responsibility in the State of Texas present such a unique problem. Section 13 of EPA's bill, however, does not adequately address the Texas problem since it requires a state to submit a plan to EPA that provides for the state to assume responsibility for the entire program within five years. It is our understanding that this may not be possible in Texas.

[1] The House Oversight Report recognizes (at p. 62), that extending the life of permits will provide "greater stability and certainty to the [NPDES] program" and more assurance to industry that it will not be required to replace or substantially modify pollution control equipment that has only recently been installed. Longer permit terms will also "allow a more effective utilization of the overburdened regulatory staffs of the EPA and the States." Id.

VI. THE NRDC CONSENT DECREE

In 1976, EPA entered into an unprecedented settlement agreement with the NRDC and several other environmental groups. That agreement, embodied in a court order, established a wide range of programs for the control of discharges of toxic pollutants not found in the Act.

Whatever purpose the consent decree may have had when adopted was superseded when Congress acted in 1977. The 1977 Amendments to the Act provide a regulatory framework for the control of toxic pollutants and give EPA discretion to implement these provisions. To the extent that NRDC's principal concern is with the slippage in promulgating regulations, Section 6 of EPA's bill provides deadlines to address this issue.

The NRDC consent decree has outlived its usefulness, and now serves principally to require certain actions that Congress in the statute committed to EPA discretion. The decree specifies criteria not found in the Act that EPA must follow in its implementation, and requires that EPA undertake programs not required by the statute.[1] It forces EPA to

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[1] The following are examples of provisions of the Decree that prescribe an extra-statutory scope or criteria for EPA regulations. Paragraph 12 requires EPA to establish a "specific and substantial program" to identify navigable waters seriously contaminated by toxic pollutants and toxic pollutants for which more stringent limitations may be necessary and to publish a "strategy" for reducing or eliminating discharges of such pollutants. Paragraph 4(c) imposes a complex program, and

(footnote cont'd)

prepare detailed justifications for many of its regulatory decisions, and the threat of a contempt suit gives the plaintiffs undue influence over EPA's regulatory actions.

Congress should make it unmistakably clear that the Clean Water Act directs EPA's program and that the NRDC consent decree should be vacated to remove the unjustified constraints on EPA's implementation of the CWA.

VII. PEER REVIEW OF EPA'S SCIENTIFIC DETERMINATIONS

The Clean Water Act directs EPA to classify pollutants as toxics, to develop effluent standards for such toxics (Section 307), and to develop water quality criteria (Section 304). In performing all of these tasks, the collection and careful evaluation of scientific information and data are critical. To ensure that the evaluation process is an objective one,

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(footnote cont'd)

related criteria, for identifying pollutants to be subject to future pretreatment standards. Paragraph 6 dictates a specific percentage of point sources (or pollutants) in an industrial category which must be covered by effluent limitation guidelines, standards of performance, and pretreatment standards. Paragraph 8 establishes criteria for the exclusion of pollutants or industry subcategories from regulations establishing effluent limitation guidelines, standards of performance and pretreatment standards. Paragraph 10(a) requires EPA to include in certain NPDES discharge permits a provision to "reopen" the permit prior to its expiration for the purpose of imposing more stringent requirements based on effluent limitation guidelines promulgated after the permit was issued. These provisions prescribe requirements wholly outside the provisions of the Act.

it is essential that there be an independent review of the scientific data on which the scientific decisions are made.[1]

In performing its functions under Sections 304 and 307 of the Act, EPA should prepare and publish a critical evaluation of the relevancy, quality and accuracy of all scientific data, studies, and analyses on which it relies. These data, together with EPA's evaluation, should then be reviewed by an independent science advisory board. The board's mandate would be solely to review and analyze the data used as the basis for EPA's decisions and EPA's evaluation of the data. It would not review the regulatory decisions themselves, since such decisions would involve social and economic considerations outside the scope of the board's expertise.[2]

The need for such peer review of EPA's scientific determinations has been endorsed by the Comptroller General in a report to Congress and by the National Academy of Sciences. Paraphrasing an NAS study, the Government Accounting Office's report states that "scientific and technical data and analyses

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[1] An independent evaluation of scientific data is particularly necessary where, as in the case of much data in this area, the data are incomplete and subject to different interpretations. There is always the danger that such data will be used to support a preconceived notion, rather than being evaluated objectively.

[2] In its review of the data and EPA's analyses of the data, the board should point out those areas in which the data or analyses are inadequate or need to be revised. In proposing a new or revised decision, EPA should be required to justify any failure to follow or respond to the review board's recommendations.

used in decisionmaking should be reviewed routinely at an early stage to assure that all relevant data is considered and to reduce the possibility of misinterpretation or misuse of scientific results."[1] The report noted that there is substantial scientific and technical expertise outside the Agency to conduct such reviews of EPA's scientific determinations. The report also stated that, of course, the public should have an opportunity to review the independent analyses of EPA data.

VIII. FEDERAL COMMON LAW LIABILITY

There have been efforts during the past year to amend the Clean Water Act to allow suits against dischargers for abatement and damages based on federal common law.[2] Such abatement orders and damages would be authorized even when a discharger is in full compliance with all applicable requirements of the Clean Water Act. Efforts to amend the Act to provide for such common law liability should be rejected. A discharger in compliance with a permit issued under the Clean Water Act should not be subject to unlimited damages based upon some ill-defined concept of federal common law.

It is CMA's understanding that amendments to the Clean Water Act to authorize common law liability would be intended

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[1] "Improving the Scientific and Technical Information Available to the Environmental Protection Agency in Its Decisionmaking Process," Report to the Congress by the Comptroller General, No. CED-70-115 (September 21, 1979) at 20.

[2] Amendment No. 542 to S. 1716, 97th Cong., 1st Sess. (1981).

to overturn the precedent of the Supreme Court in Milwaukee v. Illinois, 451 U.S. 304 (1981), which limited the authority of federal courts to develop substantive common law. The Court held that the Clean Water Act is comprehensive legislation regulating all point sources through the issuance of permits and that it would be "quite inconsistent" with this scheme for federal courts to devise their own law governing such discharges, under the guise of common law, after permits have been issued and permittees have been planning and operating in reliance on such permits. 451 U.S. at 326.

The decision of the Supreme Court in Milwaukee v. Illinois is grounded in fundamental principles of federalism as well as sound practical considerations. Federal authority should be exercised through statutes enacted by Congress and administered by federal agencies. The courts are less capable than the Congress to develop national policy in areas where Congress has enacted comprehensive legislation. The decision by the Supreme Court places reasonable limits on the court's exercise of jurisdiction. It would be anomalous to repeal this decision at a time when concern over the extent of the federal judicial power has been voiced by the administration, the public and by many members of Congress.

In addition, the growth of federal common law apart from federal statutes introduces an unacceptable degree of uncertainty as to federal standards of conduct and remedies. A permittee in compliance with Clean Water Act requirements should

not have to fear that it may be subject to a federal suit for a complying discharge on grounds of common law nuisance. Such undefined liability could lead to chaos, rendering the permit process meaningless. Congress should therefore reject any efforts to amend the Act to authorize such federal common law liability.

CONCLUSION

This testimony summarizes a number of areas in which Congress should reassess and modify present policy under the Clean Water Act to make the Act a more workable vehicle for protecting the environment and promoting the productivity of the nation. CMA is prepared to cooperate with the Congress to address these issues in a constructive manner.

STATEMENT
OF THE

SYNTHETIC ORGANIC CHEMICAL
MANUFACTURERS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE

SENATE COMMITTEE
ON

ENVIRONMENT AND PUBLIC WORKS

JULY 22, 1982

The Synthetic Organic Chemical Manufacturers Association ("SOCMA") is a non-profit association of producers of organic chemicals. A membership list is attached. Many of SOCMA's 90 members are small chemical companies.

SOCMA has identified three priority issues arising in connection with amendments to the Clean Water Act upon which it wishes to comment in this statement: (1) Pretreatment standards and programs; (2) confidentiality of certain information; (3) BAT modifications. Pretreatment requirements are of critical importance to SOCMA's member companies. SOCMA estimates as many as 75 percent of its members operate one or more

facilities which discharge industrial waste to a POTW. Protection of confidential information also is very important to SOCMA's members because disclosure of such information may have a particularly adverse impact upon smaller businesses. BAT modifications represent a major issue affecting our industry and SOCMA supports the efforts of CMA and others with respect to the need to provide for such exemptions.

PRETREATMENT

The present pretreatment strategy has not led toward measurable advancement of the goals of the Clean Water Act. Continuing confusion over the content and direction of the program has created uncertainty for the states, for POTWs, and for industrial users of POTWs.

Three facts stand out: First, for nearly a decade and under four Administrations, EPA has pursued a pretreatment strategy based on the promise that national categorical pretreatment standards under Section 307(b) were necessary and would be developed for most major industrial users of POTWs. The Agency has developed only a handful of limited scope categorical standards due to the diverse and complex nature of industrial users of POTWs, to the difficult technical issues relating to the treatability of particular wastewaters by POTWs and by alternative pretreatment technologies, and to the difficulty in resolving important questions of POTW sludge use and

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disposal. The general pretreatment regulations, keyed to the categorical standards, contain provisions for credit for POTW removal which are excessively complicated to the point that they are, in SOCMA's view, unworkable.

Second, the available data increasingly indicate that discharges by POTWs of the 129 pollutants designated as toxic do not pose a problem requiring the development of uniform national pretreatment regulations. POTW treatment has been shown to achieve significant removals of many toxic pollutants.(1),(2)

Third, notwithstanding the confusion and lack of progress at the Federal level, many municipalities have developed effective local pretreatment programs.(3),(4) SOCMA believes that many of these local programs have substantially implemented the objectives of the Clean Water Act in that they protect POTW operations, ensure compliance with POTW NPDES permit limitations, ensure safe sludge disposal, and allow cost-effective treatment of both industrial and municipal waste. It is also important to note that most of these programs have been developed in cooperation with industry through local advisory committees (including industrial users, commercial users, and public participants).

The most practical solution to the problem created by the present direction in pretreatment policies is to allow local pretreatment program development with limited federal

involvement. Ultimately, both administrative and legislative changes will be required. SOCMA believes that the following legislative changes are required for a rational and effective pretreatment policy:

- Elimination of the categorical pretreatment program.
- Adoption of revised requirements for the development and implementation of pretreatment programs which place primary authority with and responsibility on POTWs, with the NPDES agency (whether EPA or state) having authority to correct POTW failures to meet that responsibility.
- Establish as the Federal bases for pretreatment requirements (1) prevention of POTW interferences causing the POTW to violate its permit, (2) limiting pass through of pollutants to the extent necessary to prevent violation of water quality standards as reflected in the POTW's permit, and (3) ensurance of a quality of sludge, based on EPA guidelines under Section 405, consistent with the use or disposal option chosen by the POTW.

A number of administrative steps will be required to implement and complement those changes in the Clean Water Act. Among these steps would be the following:

- Review and revision of the provisions of the general pretreatment standards (such as recordkeeping and reporting requirements) to ensure that unnecessary detail, procedures, and paperwork do not discourage POTWs from developing effective and reasonable pretreatment programs.
- Careful and thorough evaluation of pretreatment programs which have been

developed by POTWs in order to provide guidance for new POTW programs.

- Use of the program proposed by SOCMA to encourage POTWs to address fully and resolve pretreatment issues including by implementation of basic public participation requirements.

- Adoption of an enforcement policy which places upon the POTW initial and substantial responsibility for taking appropriate measures to remedy violations of its permit which may be related to the receipt of industrial wastewaters.

SOCMA has reviewed the proposed amendments to Section 307 transmitted to the Congress by EPA on May 25, 1982. EPA proposes to make issuance of categorical pretreatment standards discretionary and to establish a POTW certification procedure for obtaining exemptions for those categorical pretreatment standards which are promulgated. The proposal is intended to introduce some flexibility into the pretreatment program.

However, SOCMA believes that a basic change in direction in pretreatment policy is needed and that the proposed certification procedure is likely to be unwieldy and unlikely to be effective. Most important, continued reliance on national categorical standards and some form of exception procedure would preclude the necessary focus on development of local pretreatment programs designed to implement the objectives of the Clean Water Act.

CONFIDENTIALITY

The Clean Water Act as implemented contains two exceptions to the proscription in the Trade Secrets Act, 18 U.S.C. 1905, against Government release of trade secrets to the general public. The requirement of Section 402(j) that a copy of each NPDES permit application (Consolidated Permit Forms 1 and 2C) be made available to the public has been read by EPA to preclude claims for business confidentiality of information contained in a permit application. 45 Fed. Reg. 33546 (May 19, 1980). Section 308(b) generally incorporates the Trade Secrets Act to protect confidential information but makes an exception for public disclosure of "effluent data." As defined by EPA, effluent data extends far beyond measurement of wastewater characteristics at the point of discharge. 40 C.F.R. § 2.302(a)(2). In addition, Section 308(b) allows information to be released "when relevant in any proceeding under this Act."

EPA's authority under Section 308 to collect or to require the submission of information is broad, and the NPDES application form requires a wide range of product, process and other information. Such information includes information the disclosure of which otherwise would be prohibited by the Trade Secrets Act. The Agency, by rulemaking, could partially resolve this issue. However, a more complete remedy would

result from the amendments to Section 308 and 402 of the Clean Water Act allowing the protection provided by the Trade Secrets Act to be invoked to protect information contained in an NPDES permit application form, redefining effluent data as quantities and concentrations of pollutants discharged to navigable waters, and providing procedures to protect information released in a proceeding under the Act.

Such action should be taken for two reasons: First, making business confidential information available to foreign and domestic competitors can have a significant adverse impact on the company whose information is disclosed. Confidentiality of information which is process or product related is particularly important to producers of specialty chemicals who comprise a significant portion of SOCMA's membership. Second, adequate protection of confidential information will facilitate the exchange of information between EPA and industry which is necessary for the development of sound regulations, permits and other requirements under the Act.

BAT MODIFICATIONS

The Clean Water Act contains only limited exceptions to the application of BAT to all industrial dischargers. Section 301(c) provides for a waiver of BAT on economic grounds. Section 301(g) provides for modification of BAT requirements for nonconventional pollutants if such a

modification will not interfere with the attainment or maintenance of water quality. No similar provision is made for modification of BAT effluent limitations for toxic pollutants.

SOCMA supports the position of CMA and other industry associations that the Act should be amended to provide for modification of BCT requirements for conventional pollutants and BAT for toxic pollutants based upon water quality considerations.

REFERENCE SHEET

(1) Environmental Protection Agency, "Fate of Priority Pollutants in Publicly Owned Treatment Works: Interim Report," October 1980. JRB Associates, "Assessment of the Impacts of Industrial Discharges on Publicly Owned Treatment Works," February 1982.

(2) Government Accounting Office, "A New Approach Is Needed for the Federal Industrial Pretreatment Program," February 1982.

(3) Association of Metropolitan Sewage Agencies, "Pretreatment Resource Reader," February 1982. Cooley et al., "Municipal Pretreatment Program Development," J. Water Pollution Control Federation, 54: 1067, July 1982.

(4) Subcommittee on Oversight and Review of the Committee on Public Works and Transportation, House of Representatives, 96th Cong., 2d Sess., "Implementation of the Federal Water Pollution Control Act," at 40, 44 (Comm. Print 1980).

CLEAN WATER ACT AMENDMENTS OF 1982

WEDNESDAY, JULY 28, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, D.C.

The subcommittee met, at 10:16 a.m., in room 4200, Dirksen Senate Office Building, Hon. John H. Chafee (chairman) presiding.

Present: Senators Chafee, Stafford, and Gorton.

Senator CHAFEE. Good morning. This is the third day of the Subcommittee on Environmental Pollution hearings on amendments to the Clean Water Act. This morning we are going to take up three issues. The first is the subject of Federal common law which is not included in the administration's proposals but it is of great interest to us as we work on them, as it was last year when we worked on the municipal portions of the act.

The second panel will deal with State and local issues as well as the clean lakes program. In that regard, I have a letter from Senator Proxmire with some background material that I will place in the record. (See p. 598.)

The last panel this morning will deal with the steam electric power industry and amendments to section 316 of the Clean Water Act.

We will start with the first panel, if you gentlemen will come up. Mr. Jankel, why don't you start.

STATEMENTS OF ERIC JANKEL, EXECUTIVE DIRECTOR, NARRAGANSETT BAY COMMISSION, ACCOMPANIED BY RICHARD W. CUTLER, METROPOLITAN SEWERAGE COMMISSION, MILWAUKEE COUNTY; ANGUS MACBETH, ESQ., BERGSON, BORKLAND & ADLER, WASHINGTON, D.C.; BRUCE TERRIS, ESQ., TERRIS & SUNDERLAND, WASHINGTON, D.C.; A. DAN TARLOCK, PROFESSOR OF LAW, ILLINOIS INSTITUTE OF TECHNOLOGY, CHICAGO, KENT COLLEGE OF LAW

Mr. JANKEL. Good morning, Senator Chafee. With me is Richard Cutler who is special counsel to the Milwaukee Sanitary Board and has worked extensively in litigation which has in part led to consideration of this issue.

My name is Eric Jankel. I am executive director of the Narragansett Bay Commission, a sewerage commission serving the residents and industry with some 200,000 connections in the metropolitan Providence, R.I., area. I am pleased to be here today to give brief remarks on why the Federal common law should not be inserted into the Federal Water Pollution Control Act. Our reasons

are that it would be unfair, costly, and unnecessary and create confusion in the law and with the municipalities which must obtain and operate under NPDES permits as required under the act.

Our commission, as you know, Senator, was created because the city of Providence was not able to comply with a Federal court order obtained after EPA and the State of Rhode Island brought suit against Providence. The bay commission was created by the legislature with the objective of meeting temporary permit conditions and designing, financing, and constructing a sewerage system which would collect and treat sanitary and industrial wastes so as to comply with the standards of the act and the regulations issued by EPA under it.

We in the commission are faced with an enormous task in designing, financing, and constructing a system which the engineers tell us will comply with those objectives. We are presently spending $4.5 million in design and it will take 5 years and approximately $80 to $100 million to upgrade and expand our treatment plant. Our total project cost will be approximately $200 million over 10 years. The design work is very complex. Engineers have told us that we can meet these design standards through this project.

We need to know now what standards control the design. Is it the standards reflected in the conditions of the permit and consent order of the court? Or is it all of that plus some new, presently unknown additional standard that a judge may articulate some years hence in some future litigation which can ignore the conditions of the permit and statutes? We understand that this question was the central issue decided by the U.S. Supreme Court in April 1981 in *Milwaukee* v. *Illinois*. That decision held in effect that Congress could not have intended that a judge could impose collection and treatment standards different than those mandated by Congress and contained in Milwaukee's NPDES permit. We agree that Congress and the court were both right.

It would be unfair and costly to the bay commission and the users of our system and the other cities if a Federal court were permitted by Congress to do what a Federal judge did to Milwaukee. Milwaukee's permit and a State court order, I am told, provided that the combined sewer overflows must be corrected to the point of reducing overflows to once a year and discharging treated effluent which met the standards of 30 p/m in both BOD and suspended solids measured by a 30-day average. The lower Federal court in Chicago required Milwaukee to completely eliminate CSO discharges, which is the equivalent of designing a sewer system so large that there would be only one overflow each 100 years and which required treatment to 5 p/m of BOD and SS on a 30-day average with a daily maximum of no more than 10 p/m.

I shudder to think what the cost would be to the Providence area if standards of that nature were applied on the bay commission. Would we have to redesign and rebuild the system? Would we have to throw out sewer pipes that weren't of adequate diameter or try to crowd additional clarifiers into the land previously set aside for a treatment plant?

In other words, we believe that the Supreme Court correctly said that it was sensible for Congress to have intended that an adversary proceeding before the grant or renewal of an NPDES permit

gives ample opportunity for all parties to be heard on the conditions or specifications of the permit. And after they have been heard and made their arguments for a strict or less strict interpretation of the Federal and State statutes and regulations, then the proper remedy, in my judgment, is to appeal if they don't like the conditions of the permit. At some time and place the uncertainty about design must end. We believe that the Court was right when it held that the Federal Water Pollution Control Act and the EPA regulations issued under it occupied the field or dealt with it in a comprehensive manner. You know that the court spent many pages analyzing why Congress act and the regulations under it were so comprehensive as not to leave room for a Federal judge to add something else.

We looked at the volume of the act in the regulations. The act has 164 pages. The regulations are over 1,500 pages in the code. I understand that the legislative history contains over 1,000 pages more. This was all cited by the Supreme Court in its exhaustive review of the permit system created by Congress.

Sewers are expensive and their construction is getting more expensive everyday and the Federal Government is, as you know, decreasing the percentage of the cost which it will grant to fund these projects. Any delay in carrying out the timetable for the construction of the treatment plant will delay the results that are sought to be achieved and also increase the cost of construction during an inflationary period. Also, delay could decrease the amount of Federal participation that is available. The last thing which the Federal Government should do at this time is open the doors to more litigation delay and uncertainty that would certainly follow adding the common law back to the Federal Water Pollution Act.

Without being a lawyer, it is easy to see how much confusion could be created by the seemingly simple remedy of adding the common law. That is so because the Supreme Court rules that the existing act and regulations were so comprehensive that they touched all points and thereby occupy the field. What purpose would be served by adding the common law? If Congress does add it, then the courts will ask what was the purpose. Would it be that Congress was saying that it lacked confidence in the fairness of the standards set by it and that the court could set higher or lower standards? I doubt that, but the questions might be asked. Or does it mean that Congress disagreed with the Supreme Court when it praised the legislation as comprehensive and that Congress now felt that there might be some unspecified gaps which the common law might fill without inviting the courts to use the common law to overrule specific provisions in the Federal Water Pollution Control Act or the EPA regulations? Who is to tell? Won't this uncertainty occasion even more litigation just to find out what Congress meant by adding the Federal common law on top of our extensive act Congress has passed and the regulations that EPA administers?

Because of the complexity of this subject, we have attached a position paper prepared by Milwaukee and endorse their opinion. (See p. 629.) What happened to them is a horrible example of our concern. The Supreme Court has now ended the uncertainty in the field. And we hope the committee, Mr. Chairman, would not move

in such a way that what happened in Milwaukee could happen to the Bay Commission in Providence.

Senator CHAFEE. Thank you, Mr. Jankel. I will ask questions when we finish the panel.

It seems to me the real problem is the interstate difficulty. Of course, you had that in the Milwaukee situation, those were people in Chicago.

Mr. CUTLER. The State of Illinois.

Senator CHAFEE. Thank you. Mr. Macbeth.

STATEMENT OF ANGUS MACBETH

Mr. MACBETH. Good morning. My name is Angus Macbeth, I am a partner in the law firm of Bergson, Borkland, Margolis & Adler. I want to thank the committee for inviting me here this morning to discuss the Federal common law issues in relation to the Clean Water Act.

As you know, in the case of the *City of Milwaukee* v. *Illinois,* the Supreme Court——

Senator CHAFEE. Did you testify here on the Lacy Act?

Mr. MACBETH. Yes; I did.

Senator CHAFEE. Welcome back.

Mr. MACBETH. Thank you.

In the case of the *City of Milwaukee* v. *State of Illinois,* the Supreme Court concluded that the Clean Water Act was so comprehensive and complete there was no longer a place for Federal common law in the water pollution area. I think, though, it is also clear that State common law remains in place and I simply underscore that in relation to what Mr. Jankel has said, since the liabilities under common law generally are not removed by the Supreme Court decision in the *Milwaukee* case.

No one can doubt that in writing the Clean Water Act Congress covered a vast number of issues. But I submit that there still remain, and almost inevitably will remain, unforeseen situations which the Federal courts should be free to deal with as they arise and where Federal common law is appropriate.

I would like to begin by giving a few examples of situations of that sort. First, I turn to the emergency provision of the statute, section 504(a) of the Clean Water Act which allows the Administrator of EPA, when he believes there is eminent and substantial endangerment of health or welfare, to bring a suit to restrain the discharge of pollutants or to take such other action as may be necessary.

The language of that section of the Clean Water Act is very close to that of section 7003 of the Resource Conservation and Recovery Act and of the emergency provisions of the other pollution control statutes. Some courts have found, particularly under RCRA, that the analogous provision in RCRA is jurisdictional only. In other words, it does not in itself contain substantive law and the courts have looked outside the statute, typically to the common law, to find the substance that should be given to that section, the principles of law that the court should follow.

That is one clear example of a place where Federal common law is very appropriate. In emergency actions brought by the Adminis-

trator one wants a uniform way of handling cases across the country. I think that provision is a clear example of a place where Congress has recognized it can't see everything that is going to come up, the whole array of possible pollution problems that will need to be addressed.

Another area that I think is appropriate for Federal common law is interstate damage from a Clean Water Act permit violation. The Federal courts have typically been viewed as the best vehicle for resolution of interstate disputes and if you take the situation, for instance, of a complaint of damage from an excessive discharge on, say, the Colorado River, there is a strong argument that handling a dispute of that sort, when it is an interstate matter, in a Federal court rather than in the courts of California or Colorado.

Frankly Congress must recognize that there may well be other interstices in the act created not by the way the statute is written but by the way the statute is administered. If you look at the toxic control program under the statute which has been in the law now for 10 years, I think everyone would have to concede that very little in fact has taken place in the way of putting regulations in operation under that provision. This administration has not done much better than the last two or three administrations in dealing with toxics.

If there is damage from toxics, there is a good argument that the plaintiff should be able to go into a Federal court, have the general policies of the act considered and seek a Federal common law remedy and not be told simply that he has to wait whatever it may be, 3 years, 5 years, 10 years, until the EPA is able to put into place a program for the control of toxics which the statute required it to do many years ago.

Finally, there are areas that Congress, I think, simply didn't think about at all at the time when the statute was written, and I raise one here that is analogous to a major problem under the Superfund and that is the question of contribution between parties who are liable for a discharge violation. In a situation, for example, where a municipality holds a permit and there is a discharge in excess of the permit terms, both the municipality and an indirect discharger may have contributed to it. The municipality or the indirect discharger could be held liable, but the Government might well bring suit only against the permit holder.

The question that arises is whether the municipality in that situation would have an action in contribution against the indirect discharger. Now, to my knowledge, there is no place in the statute or in the legislative history where the availability of such a remedy is addressed. It seems to me again a kind of situation where the application of Federal common law would be appropriate. Probably at the present time the Supreme Court would rule that in fact no contribution would be allowed. But, it seems to me the kind of situation where the Congress can properly say that it wants the courts to develop that area in accordance with the principles of common law.

Having made that reference and analogy to the Superfund statute, I would like to underscore that there are two places in the pollution control statutes generally where Congress has purposely left areas for common law development. The legislative history of Su-

perfund makes it clear that on questions of liability where the statute itself does not set out the standards of liability, the courts are to turn first to section 311 of the Clean Water Act and after that to the traditional and evolving principles of the common law. Also in the Resource Conservation and Recovery Act, in the criminal provisions for the knowing endangerment defense, Congress has explicitly stated that all general defenses should be determined by the courts of the United States according to the principles of common law as they may be interpreted in the light of reason and experience.

Senator CHAFEE. Mr. Macbeth, your time is up. Are you about finished?

Mr. MACBETH. If I may make one final point.

Essentially I am directing my attention to a narrow series of cases, but where you need to have the policies and principles of the act enforced uniformly, where you have interstate problems in particular, or the statute is silent on an issue, it seems to me appropriated and fully proper to retain the Federal common law as a vehicle by which the courts can address and resolve the issues not explicitly answered by the statute.

Thank you.

Senator CHAFEE. I would be interested in having you address the situation as to the ability to go into a State court in the event that, say, the problem was an intrastate one, namely, someone south of Milwaukee, in Wisconsin, could that person, absent our doing something, giving that right here, could that person currently sue?

Mr. MACBETH. Yes; he could. He obviously would get whatever relief the State law provided, and that would vary, obviously, from State to State. But my reading of the *Milwaukee* decision is that State common law survives. The court did not read Congress as stating that the Federal statute has preempted State law.

Senator CHAFEE. Do you agree with that?

Mr. CUTLER. I disagree with interstate water disputes but I agree with intrastate disputes.

Senator CHAFEE. That is what the question was, intrastate.

Mr. CUTLER. We have to be careful. Answering your question directly, if a Wisconsin municipality were to sue the city of Milwaukee, we think the State was untouched by the Supreme Court decision.

Senator CHAFEE. Mr. Terris.

STATEMENT OF BRUCE TERRIS

Mr. TERRIS. My name is Bruce Terris. I am a partner in Terris & Sunderland which has been litigating environmental matters for national environmental organizations, governmental and Indian bodies, and local groups of farmers, ranchers, and other ordinary citizens for 12 years.

The issue which I have been invited to discuss is the question of Federal common law nuisance actions. I strongly support an amendment to the act to reverse the second *City of Milwaukee* v. *Illinois* decision so that such suits can be brought.

It is important to stress at the outset that such an amendment would only restore the law as it stood before the Supreme Court's

decision a year ago. Prior to that time, the Supreme Court's first *City of Milwaukee* decision held that Federal common law was enforceable against polluters, and the lower Federal courts were faithfully carrying out this mandate. The Supreme Court then abruptly changed the law. I submit that this second decision is inconsistent with Congress intention and should be reversed.

It is also important to stress the limited, though important, nature of an amendment to restore Federal common law remedies. Before the second *City of Milwaukee* decision, only a handful of Federal common law cases had been brought relating to water pollution. Most litigation to reduce water pollution was brought by Federal or State entities under the Water Act or, less often, by citizens groups under that same statute. If Congress restores Federal common law remedies, it is virtually certain that most cases will continue to be brought under the statute.

Nonetheless, common law remedies are important for several reasons.

First, they are needed when the statute is not sufficient to prevent serious pollution. The statute is now largely technologically based. It is possible to cause severe harm to downstream water users even though the polluter is complying with the technological standard.

Second, the statute is not always enforced. For example, the mechanism for preventing toxic discharges is still not in place despite strong efforts by environmental groups to compel EPA action. At a time when EPA enforcement of environmental laws is, to put it mildly, not exactly vigorous, there is a particular need to allow other remedies.

Third, the statute necessarily has gaps. It is long and complicated enough without Congress seeking to anticipate every conceivable possibility. It makes more sense for Congress to allow the courts to provide a remedy in the unusual case.

In all these three circumstances, unless the second *City of Milwaukee* case is reversed, the Clean Water Act actually results in reducing effective control of water pollution rather than adding to it. In these situations, if there were no statute, litigation could have been brought under the first *City of Milwaukee* decision. Based on the existence of the statute, even though it cannot be enforced or EPA is choosing not to enforce it, Federal common law remedies for these pollution problems are eliminated.

Senator CHAFEE. Could I ask a question. You referred to the first Milwaukee and the second Milwaukee.

Mr. TERRIS. The first case was the Supreme Court decision recognizing Federal common law remedies.

Mr. CUTLER. That was before the Clean Water Act.

Mr. TERRIS. The decision was issued before this version of the Clean Water Act. There was a Clean Water Act.

Mr. CUTLER. Milwaukee decided in 1972 before the Federal RCRA, which was passed 5 months later, and Justice Douglas in the first day said: The day may come when the Federal statutes and regulations so occupy the field as to preempt the Federal common law. That kind of prophecy that the Supreme Court held came true.

Mr. TERRIS. The point I am making, Mr. Chairman, is that Congress thought it was going to strengthen water pollution control in these situations where the act either is not applicable or is not being implemented. There actually will be more water pollution control if Congress does not foreclose the courts' common law remedies. I submit to you that Congress never intended that its statute would result in situations where it would weaken the ability to reduce water pollution.

Senator CHAFEE. Could you address the point Mr. Jankel made that millions and millions of dollars are being invested in these plants to comply with the permit and then to have somebody be able to go to court and add a further requirement upon the municipality above and beyond what the permit has previously permitted to be accomplished.

What is the answer to that?

Mr. TERRIS. It seems to me there are two answers. First of all, where there are permits and specific authorization I think there is a substantial chance that under the common law the courts will not go beyond those permits. There are a number of nuisance cases, both in water pollution and other fields, which hold exactly that.

If courts do go beyond the permits—and that I think is not an absolutely settled proposition——

Senator CHAFEE. That is the whole reason you are here.

Mr. TERRIS. No; it is not the whole reason. There also are situations in which permits, for example, do not deal with the particular problem and were not intended to deal with it, and the question is whether nuisance law should be applied.

In the situation where a court does go beyond a permit, there is no doubt that it is going to give extremely heavy weight to the terms of that permit. That is the traditional rule under nuisance law, and I think only in extreme situations is there any likelihood that a court will go beyond a permit.

I do not think it is useful to concentrate on horrendous cases, for while one can always think of courts doing something bizarre or outrageous, that is not what our courts normally do in this country. They are very cautious. In preparing for a speech I gave a couple of years ago, I looked at a lot of nuisance cases. They revealed that courts are very very modest in the kind of actions that normally are taken. And they demonstrated that court, give very great weight to the actions taken by governmental bodies.

Senator CHAFEE. Could we hold here. I have to take a call and we will have a very brief recess.

[Whereupon, a short recess was taken.]

Senator CHAFEE. All right, Mr. Terris, I apologize for the interruption. Why don't you continue.

Mr. TERRIS. I would like to expand a little bit on my response, Mr. Chairman, to your question of how limited a nuisance remedy is.

Nuisance actions can be rejected by a court even where there has been substantial damage to a downstream user because the court balances the importance of the polluting action and the cost of cleaning it up against the harm to the downstream user. So even if you have a fairly extreme situation, if there is justification for the

polluter's action, the court might not give a remedy. For example, the people in Rhode Island are concerned that they will spend a great deal of money for the most modern technology and then later find that a court is going to later tell them it was not enough. That is an extremely unlikely result since equitable principles are applied under nuisance cases in order to balance the parties' appropriate rights. It isn't enough, in other words, to find that somebody has been hurt.

I submit that Congress should welcome the assistance of the Federal courts in seeking to control water pollution in this country. The use of Federal common law provides effective remedies without new complicated legislation or a bureaucracy for enforcement. It allows the courts gradually to fashion specific remedies for specific problems in a manner in which the common law traditionally has developed It allows Congress to watch the development of the law, and to then decide a few years hence whether or not it wishes to provide the courts with more guidance.

On the other hand, there is little for industry to fear from allowing Federal courts to entertain nuisance actions. The courts have entertained nuisance litigation for many years without disrupting the legitimate expectations of industry.

Moreover, Federal nuisance law is surely superior from the standpoint of industry to State law, which is presently enforceable under the second *City of Milwaukee* case, since Federal law will produce uniform national rules and not result in a polluter being hauled into a foreign and hostile State court. I do not think there is any constitutional principle which prevents a polluter in one State from being brought into a State court in another State.

Senator CHAFEE. I am going to ask a question for you to answer when you finish.

If you are subject to all these perils through State court action, what is the difference in being subject to that litigation in a Federal law?

Don't tell me now.

Mr. TERRIS. In short, this amendment is an extremely modest one. It simply returns the state of the law to the point it occupied only a little over a year ago. It simply provides for water pollution control where the statute is not effective. I submit there is no good reason for this amendment not to be adopted.

Senator CHAFEE. Mr. Tarlock.

STATEMENT OF A. DAN TARLOCK

Mr. TARLOCK. Thank you and good morning. My name is Dan Tarlock. I am a professor of law in the Illinois Institute of Technology.

Since the decision of *City of Milwaukee* v. *Illinois* was decided, I have told law students, colleagues, and lawyers this decision is bad law, bad policy and an appropriate one to be reversed by Congress. I am honored to have the privilege to be invited to deliver this message to an audience that has the power to remedy the decision.

Senator CHAFEE. I applaud your confidence that we have all that power. But you are speaking to one one-hundredth of the Senate right now—excuse me, three one-hundredths.

Mr. TARLOCK. It is more prestigious than a law school class.

In my written statement I set out the five reasons for the need to preserve a Federal common law nuisance.

Senator CHAFEE. That gives you a minute per reason.

Mr. TARLOCK. I am going to go to the last minute.

First, I think that the general doctrine is a sound one, and the revival ought to be considered independently of the facts of *City of Milwaukee* or some of the lower Federal court cases that have extended the doctrine beyond interstate disputes brought by an injured State.

Second, I think it is important to point out that the majority opinion in the *City of Milwaukee* is not based on constitutional principles of the special concern of the Supreme Court. This is not the abortion decision. Rather, the decision is based on a wrong reading of congressional intent and I think on a wrong assumption about the primary interest protected by the act.

Third, the majority opinion, I think, is technically weak, both on the Federal common law and section 505 savings clause, but the dissenting opinion deals with these defects.

Fourth and fifth, I think that the majority opinion is bad pollution control policy because it reflects the erroneous assumption that compliance with the Federal and State pollution standards are in all cases to be the maximum liability to which a discharger should be subjected.

And, finally, it seems to me that what is really wrong with the opinion is that there is two interests to be accommodated: One is the discharger interest in limiting his liability, which is very important; and the other one is the public's interest in being protected from serious public health hazards.

It seems to me, as Mr. Terris indicated, that these two interests can be accommodated through the Federal common law nuisance which sets very high standards for a suit to be brought.

Now, in my remaining time I would like to concentrate on my policy dispute with the majority opinion.

The Federal common law has been around, since 1960 at least, so it seems to me that a court ought to displace it in the face of comprehensive pollution control legislation not as the court did just because the legislation is comprehensive, but only if it can point to some important Federal interest that is going to be frustrated by a Federal common law.

I don't understand that the Clean Water Act stands for the proposition that effluent limitations in all cases represent the maximum pollution that the Congress wishes to control. There are too many unexplored issues in the Clean Water Act that I think support that proposition.

Then, it seems to me you have to conclude, as the majority must have done, that the important Federal purpose is that dischargers be limited in their liability in situations where they comply with Federal pollution control permit. In other words, noncompliance is the only basis for their liability.

I don't think that that is the primary purpose of the act. You would know more than I, but in the thousands of pages of legislative history that I read, nothing in that history compels the majority opinion.

There are two purposes served by the act. One is to protect the public health; the other is to protect the discharger liability. And, as other witnesses have pointed out, there are gaps in the act, unanticipated problems, situations where compliance with standards is not enough.

How do you accommodate the two interests? I think it is important to realize there are at least four major barriers to bringing a common law nuisance suit and these are barriers that are in the control of the courts.

First of all, a plaintiff State has to sue parens patriae, they have to protect their whole citizenry. There are limited situations in which it can sue and whom it can sue.

In the Supreme Court opinions interpreting the doctrine, you have to have the proof of cause in fact that a serious injury has occurred. For more subtle risks, congressional legislation will remain the remedy.

Third, as Mr. Terris pointed out, courts have general equitable jurisdiction to balance the equities. Maybe they should have done more in *City of Milwaukee,* but I am not here to discuss that case. But, clearly, courts have equitable jurisdiction. Maybe, as Justice Holmes has suggested, they have a little less in interstate suits than they do in other suits but they have ample power to fashion flexible remedies.

I think in many ways dischargers are better off under a common law nuisance suit because there are more defenses open to them where under the Water Act where as you move to best-available-technology, the cost benefit defenses shrink. They remain open at all times under the suit.

Finally, I think the seventh circuit in its opinion reviewing the district court's decision in the *City of Milwaukee* laid down a very important principle and one consistent with the general law, and that is that, compliance with applicable standards is a presumptive but not a complete defense to a Federal common law action.

I think Mr. Terris and Mr. Macbeth are right, most actions will be dismissed on the ground that the discharger is complying with applicable limitations.

Senator CHAFEE. You got to wind up, Mr. Tarlock.

Mr. TARLOCK. That is basically it. I will stop.

Senator CHAFEE. We will put you down as being unenthusiastic about the opinion.

Mr. Cutler, what do you say to that question I asked? If you go in the State court, what is the difference? You are going to be harassed there.

Mr. CUTLER. The State of Illinois or the downstream State could, through a long-arm statute, if there were a trail of effluence that reached to them, bring you before them. So, I agree with what he said the State court or Federal court could do it.

Senator CHAFEE. They can go to the Wisconsin court?

Mr. CUTLER. Yes. I answered your question yes to that before. But as regards to the application of the common law, I do not agree that it is constitutional for, let's say, Illinois, in the State court or in the Federal court to appoint the Illinois common law to an upstream State. That is something that only Congress can do or the Federal common law. That is because we are a republic, the Feder-

al system. That has always been so. *California* versus *Colorado, Arizona* versus *Colorado,* all of those cases has been common law until Congress spoke with precision. Once they spoke with precision, that preempted and displaced Federal common law.

Where he and I differ is the nature of the common law that can be applied. I say it can't be a State common law, it can't be a downstream State common law in an intrastate dispute.

Senator CHAFEE. I must say, Mr. Terris, Mr. Tarlock, Mr. Macbeth, I am troubled about the point that Mr. Jankel raised about the tremendous expense that is involved in trying to anticipate everything. You spend millions of dollars in the State of Rhode Island, in Providence Mr. Jankel said they are going to spend $200 million on a plant to abide by all the rules, you get all the approvals and then you turn around and you are hit with a suit that you say wouldn't be frivolous, would require very substantial proof, the hesitancy of the courts to apply the nuisance common law freely, yet that is exactly what happened to the city of Milwaukee in the original case. What can Mr. Jankel do?

Mr. TERRIS. My understanding is that that isn't what happened to the city of Milwaukee. The seventh circuit overturned the district court's restrictions on treated sewage covered by the permit, and ended up prohibiting only over-flow that was untreated? In other words, if the description of what is being done in Rhode Island is accurate, I don't think any court probably would entertain a nuisance action in that circumstance.

Senator CHAFEE. I think Mr. Jankel said some days there will be overflows regardless of what they have. You have a torrential rain and you can't handle it all.

Mr. JANKEL. That is correct.

Mr. TERRIS. And it is going to cause severe harm to downstream users—is that accurate?

Mr. JANKEL. That argument could be made by downstream users, yes.

Mr. TERRIS. It would have to be proven. Arguments usually don't win lawsuits.

Senator CHAFEE. What were the compliance costs for Milwaukee?

Mr. CUTLER. To comply with a permit in a State court order——

Senator CHAFEE. To comply with the decision in *Milwaukee* two.

Mr. CUTLER. These are in papers we are submitting to you. As to the excess treatment standards, $344 million which the EPA rule was not grant eligible because it was not required in the Clean Water Act, these are excess design standards, and $500 to $800 million to eliminate all overflows for the 100-year storm. The judge at one point was at a 1000-year storm. The EPA was not in the courtroom, the Department of the National Resource was not in the courtroom. You have the two Federal judges in the city of Chicago with the attorney general of the State of Illinois presenting the case and Milwaukee argued that these expert bureaucracies were indispensible parties, and he ruled no. He did not waive the equities at all. He didn't let Milwaukee put in the availability on the Federal fund. He said that is irrelevant, it is not a Federal problem.

Mr. MACBETH. If I may. It seems to me that the real issue before the Congress is not the merits of the *Milwaukee* case itself. The

real question has to be whether the general principle is sound—if someone can show serious harm and there are not countervailing equities on the side of the defendants, whether the plantiff should have a remedy under the Federal common law, at least in the interstate situation. It seems to me that it is more appropriate to provide that remedy in a Federal court than to attempt to do it through the State court.

I think Mr. Cutler's earlier argument to the effect that Illinois should not be able to impose its pollution control standards on the Milwaukee dischargers makes the point very effectively. If Milwaukee's damage to the waters of Illinois is going to be reviewed, it ought to be reviewed federally and not, as he points out, under Illinois State law.

Senator CHAFEE. My time is up. Senator Stafford.

Senator STAFFORD. Thank you, Mr. Chairman. I regret that another committee required my presence until apparantly all but one of the panel had spoken.

I would like to ask the gentleman from Illinois, or anybody else who might wish to respond, if reliance is on State common law—as a hypothetical question: Would it be possible for Louisiana under its common law to bring a proceeding against the State of Illinois for dirtying up the Mississippi River? Would that be possible? And would it have any extra territorial effect beyond the boundaries of Louisiana?

Mr. CUTLER. Senator, that argument is now before the seventh circuit court in Chicago and yet Milwaukee maintains that they can. We use the big-buddy. Each State on the Mississippi cannot impose its standards against all the ones upstream. It has to be a Federal law, either the Federal statute or Federal common law.

Senator STAFFORD. You are saying that a Louisiana State common law would not be applicable or at least effective?

Mr. CUTLER. In interstate dispute, yes.

Senator STAFFORD. Does anybody disagree?

Mr. TERRIS. I disagree insofar as the suit involves private polluters. If you can get jurisdiction over a private polluter, I don't think there is any doubt that the State where harm occurs, or a private person in that State can bring suit based on the law of the State, where the harm occurs. I think that industry would be far happier being in Federal court rather than a hostile State court.

Senator STAFFORD. You are saying if Louisiana had a course of action against a polluter identifiable in Illinois, the Louisiana party could bring a suit in Illinois against the polluting person? Is that what you are saying?

Mr. TERRIS. It can also bring a suit in Louisiana if it happened to have jurisdiction.

Senator STAFFORD. How would they enforce that against someone in Illinois?

Mr. TERRIS. That depends on the kind of company being used. If you had a national company, then it would probably have jurisdiction and the ability to enforce a judgment.

Senator STAFFORD. In the State courts of Louisiana?

Mr. TERRIS. Yes.

Senator STAFFORD. Would the situation be much better if the Federal courts were used?

Mr. TERRIS. I think it would be better because in a situation like that I think everybody is better off with the more uniform rule. First of all, in interstate water allocation suits, where the Supreme Court has applied a Federal common law, they have always started with local law as the source of Federal common law. Second, I don't think you are likely to find that much variation among the States on a doctrine such as nuisance. It is very speculative as to what the prejudice to a State might be.

Mr. CUTLER. The Supreme Court did twice answer your question in *Milwaukee* one and *Milwaukee* two. I think in the interstate water dispute, it is quite clear to me that the only law that applies is the Federal law. The question is, Is that a statute or a statute plus the common law, and the Supreme Court decided the statute alone? It is the substantive law we are talking about here.

Senator STAFFORD. Mr. Jankel, is it your opinion that because powerplants emitting sulfur dioxide that get into the air in Ohio are permitted under the Clean Air Act, that the State of Rhode Island should have no recourse against them or the State of Ohio or under the Federal common law?

Mr. JANKEL. As a nonattorney, Senator——

Senator STAFFORD. Your opinion may be better than we who are attorneys.

Mr. JANKEL. I think that the proper forum in the clean water situation is in the permitting proceeding and I think that—we are talking about acid rain and the problems associated with the transportation of pollutants through the air, I think that the problem goes back, perhaps, to the fuel that is being burned and some of the economies of fuel supply that are effective in that aspect of the transportation of airborne pollutants that aren't there in the water situation.

I think that the downstream users have an obligation, as I am told by Mr. Cutler that in the *Milwaukee* v. *Illinois* situation the State of Illinois never came into the permit proceeding and tried to raise the issues in that adversary proceeding but chose to go to the Federal court instead.

Senator STAFFORD. Mr. Chairman, I have other questions I am going to submit in writing to these witnesses. I will yield my time but first I want to say that in my checkered career I was once Governor of Vermont, as Senator Chafee was of his State. One of my pet projects that I hoped the legislature would adopt at one time, the night before it was to reach the floor of the Vermont House, the then attorney general told me he thought that what I wanted to do was unconstitutional. I asked him to come up and explain to me why he thought that, and he said when he reached my office that he had an opinion from New Hampshire and an opinion by a former attorney general of Vermont that indicated what I wanted to do was unconstitutional. And I said: "What damn fool in Vermont wrote that opinion?" And looking me right in the eye he said: "It is a damn fool whose initials are RTS."

It proves that sometimes our opinions live to haunt us.

Thank you, Mr. Chairman.

Senator CHAFEE. Thank you, Senator Stafford, for coming and we will submit those questions.

Senator Gorton.

Senator GORTON. Mr. Tarlock, recognizing that you have nothing affirmative or supportive to say about the *Milwaukee* decision, but recognizing that there may be those who disagree with you, is there a principle or policy distinction between the decision in *Milwaukee* and the decision in *Seaclammers?* Might we feel that *Milwaukee* is correct in whole or in part that it does state good policy but nevertheless seek to reverse the decision at *Seaclammers* on the ground that private parties at least ought to be able to enforce Federal permits and Federal standards?

Mr. TARLOCK. I guess if I had to make a choice, I would say that I would rather see *Milwaukee* reversed and *Seaclammers* stand in that those plaintiffs still have remedies under State law.

So the question is: What more do you need to give them? Because I think more people have the potential of being helped by Federal common law.

Senator GORTON. Is it your primary criticism of *Milwaukee* that the Federal statute in this case is not comprehensive or is it your primary criticism that even if we consciously adopt what we consider to be a comprehensive statute we should nonetheless authorize Federal common law action?

Mr. TARLOCK. I guess I would state my criticism this way. It seems to me that the Supreme Court's decision makes dischargers and other people who may be called polluters better off because they have an immunity that other people don't. Now, it is perfectly all right for Congress to want to give them that immunity. I would like to see Congress make that decision directly and I don't think that you can use the abstraction of comprehensiveness to reach the conclusion that dischargers were intended to be better off than they would at common law.

Senator GORTON. By Congress taking no action at all right now we would have made exactly that decision, would we not?

Mr. TARLOCK. But then the issue has been put before you and then a decision has been made.

Senator GORTON. Then is the answer to my question that as and when Congress determines to pass a comprehensive tacit on this subject, it should preempt common law remedy?

Mr. TARLOCK. I think you have to take that case by case. I would like to say, as a weak argument, that I wish Congress would pay much more attention to the remedy aspect of the statute that they pass one way or the other.

Mr. TERRIS. It seems to me that Congress should allow a Federal common law remedy especially if it is trying to be comprehensive. I think it wants to be comprehensive. It obviously has written a long, complicated statute. But there is no way Congress could cover all subjects, and, I think that is one of the problems that has occurred in Congress in recent years—the notion that it will try to do so. When it does that, it produces this legislation which is almost incomprehensible by any human being, including Congress. Congress ought to have a little faith that the courts are quite conservative institutions that will act only in very extreme situations.

Senator GORTON. But at best in a particular piece of legislation involving two or even multiple parties, the overall national interest and predictability, for example, is not before the court, is it? The court's function is to determine the controversy between two indi-

viduals or two groups, it presumably is never going to take a national view of the subject matter, is it?

Mr. TERRIS. Except under Federal common law of nuisance, where that is exactly what it is supposed to be doing. It is supposed to be fashioning national remedies, remedies that can be applied nationally. That is why the Federal common law of nuisance doctrine originally was created—so the court would be considering national questions. But in doing so, it is going to balance the particular facts and apply traditional equitable doctrines.

Senator GORTON. So it plays no value or perhaps it would be a fairer, a relatively smaller subsidary value or smaller value on cost of predictability on the part, in this case, of the dischargers, that the proposition that the city of Milwaukee or the Narragansett Bay Commission and the like should be able to take actions in compliance with a fairly complex Federal statute knowing that that compliance will immunize them from significant further liability is of relatively small social utility.

Mr. TERRIS. I think it is of significant utility. I don't want to belittle it. But I don't think it is at as high a level of utility as protecting against water pollution. I might say that beyond that the fact that State law does apply means that the predictability is not total. In fact, there would be more predictability if we applied uniform Federal common law standards rather than State standards that may be relatively similar from State to State but are not identical.

Senator GORTON. All that is argument for us to preempt State common law as well.

Mr. TERRIS. But I think in a Congress attuned to the notion of State powers, that would seem to me a peculiar thing to do at this point.

Mr. MACBETH. Also, Senator, if you think about preempting State common law, you have to think of a lot more situations than simply compliance with permit terms. The typical situation is injury caused by discharge in excess of permit terms. If State common law were preempted in that area, then the only remedy available would be a $10,000 penalty going to the State and there would be no private remedy for harm done to private persons left.

The question, if it goes toward preemption of State common law is much broader than whether partial or complete immunity form suit should be provided by compliance with permit terms.

Senator GORTON. I tend to agree with you, it does bring me back to the first question I asked of Mr. Tarlock, and you may wish to comment on it again, that was based on the preemption that the Federal statute was attempting to be comprehensive and was a question on whether or not there should not be a right to enforce at least the terms of the Federal permit on the part of an individual, whether or not the expansion of that doctrine is reversible of the *Seaclammers* case would not solve at least some of the problems which you raise here.

That is the first question, or comment, that I have. And the second might be a more precise approach to the entire problem we have here, making it clear that any preemption on the part of Congress applies only within those subsubsections which Congress or permits actually addresses. I feared greatly—and, as a matter of

fact, I was on the other side of one of these things in the Supreme Court myself as attorney general, where you have a preemption by Congress which is applicable even when Congress or the permitting authority has done nothing at all. In that area, it seems to me you have a very strong argument against preemption.

I must say, as the Federal regulation becomes more precise and as one is dealing within the parameters of a permit, that the argument of preemption, in my view, becomes weaker.

Mr. TERRIS. This is the case in *Atlantic Richfield.*

Senator CHAFEE. Gentlemen, these answers have got to be terse because time is going on and we have two more panels. Who is at bat?

Senator GORTON. That is my last question, but I would like to let any of the panels who wish to comment to do so.

Mr. MACBETH. I would say the statute is not comprehensive because it does not deal with all water pollution problems, injury to private parties, and emergency provisions. I think there is a place in the interstices of th act for the courts to act. I do agree with you generally on the question of the *Seaclammers* case as well.

Mr. CUTLER. Senator, you have been hearing only from those, one is an engineer and one is an attorney. If I may speak briefly. We think the act is comprehensive but assume for the sake it weren't the type of amendment that has been suggested by some, that raises very confusing problems as to where Congress has been specific and something is in the permit very precise, is the judge at liberty to lower that or increase it 5 years later? That is the uncertainty and I think we all would agree certainty in the permit is entitled to some weight. How much weight? Many feel it should be entitled to complete and total weight. Some of the environmentalists would like it to have no weight at all because it is a barrier to their winning in cases. You have these two opposite positions. We think the act is comprehensive. We submitted with Mr. Jankel's remarks an 18-page summary analyzing the permits and analyzing the situation and showing you the elaborate care—they were instructed to do everything possible, but on top the Federal judge added the 100-year storm, which is unthinkable. Federal judges do not balance the equity unnecessarily. In this case it was a horrible injustice that hangs as a specter over all American permit holders. I think that is one of the motivating forces.

Senator GORTON. Thank you, Mr. Chairman.

Senator CHAFEE. All right, we will move to the next panel. We will start with Mr. Whitney. Ladies and gentlemen, we are under some time constraints and I would ask that you make your statements within the required 5 minutes. We unfortunately have to limit you to that.

STATEMENTS OF CLINT WHITNEY, EXECUTIVE DIRECTOR, CALIFORNIA WATER RESOURCES CONTROL BOARD; MONTE PASCOE, DIRECTOR, COLORADO DEPARTMENT OF NATURAL RESOURCES; JAMES BROWN, DIVISION DIRECTOR FOR WATER QUALITY, IOWA DEPARTMENT OF ENVIRONMENTAL QUALITY; AND THOMAS U. GORDON, PRESIDENT, NORTH AMERICAN LAKES MANAGEMENT ASSOCIATION

Mr. WHITNEY. Thank you, Mr. Chairman, Senators. I am Clint Whitney, executive director of the California State Water Resources Control Board. I appreciate the opportunity to appear before you today.

EPA's proposed amendments to the Clean Water Act appear in large part rather modest. We do take exceptions to a couple of points which I will summarize and highlight.

First of all, California objects to any cuts in 106 funds. The $40.9 million authorized by this bill is inadequate to support the Federal/State partnerships so carefully built since 1972. While EPA espouses increases State responsibility, it is apparently unwilling to continue funding at the modest levels of the past.

California funds 80 percent of its regulatory activities out of State funds, EPA provides only 20 percent. If that 20 percent is reduced, we must reduce work in the basic regulatory programs in California. It is our understanding that you have been led to believe that excess 205(g) money and the new 205(j) money should make up for these funds, in California that simply can't work. We do not have any excess 205(g) money.

The next point that I would like to make to you will speak to a defect we think is in the act in that regard.

The 205(j) money, it is our reading of the act, was intended for other purposes and a great deal of competition for that money and therefore can't effectively be used for this purpose.

We therefore recommend that you restore the 106 money to its former levels of around $52 million or even higher if you think you can afford it, although we believe that might be a little tough.

Second, we ask Congress to take this opportunity to remedy a serious defect in the allocation systems for 205(g) and 106 funds. Ironically, California suffers because it does a good job with the money you give us. In order to forestall inflationary cost increases, the money is put to use rapidly, we have no reserve, unlike many other States. When the Congress fails to pass an appropriation bill for many months into the fiscal year, as you did this year, California must dismantle its basic system of allocating money while other States have reserve to see them through. We are penalized for doing a good job. We ask that you amend the Clean Water Act to facilitate and encourage EPA to deobligate and transfer directly to any other State in need of 205(g) money and 106 funds unused by a State within 2 years of its appropriations.

We are now in the process of furloughing 20 percent of our work force because of the delay in the last appropriation. If we do not get the 1983 appropriation, that furlough will continue and we will be forced to give this program back to the Federal Government. We do not desire that and we believe that EPA does not want it back.

Another point that I would like to emphasize briefly is on pretreatment. California fully endorses the concept of pretreatment presently embodied in the act. If amended this section should not abandon the idea that the best protection of the environment is to prevent pollution at the source. EPA should diligently pursue the promulgation of guidelines and standards for those industries having the potential for environmental harm so that State and municipalities can design effective pretreatment programs.

Finally, I would like to make a point about section 10 of the proposed EPA amendments. This provision would give the President authority to exempt Federal facilities. We are adamantly opposed to this provision and the Congress should reject it. The current systems work well, military authorities are cooperative because States have the necessary authority, in our case at least. One of the examples of the benefits of current provisions can be seen in the Sacramento area, our Regional Water Quality Control Board inspection of several military bases show threats to ground water sources from aerospace chemicals. These are voluntarily cleaned up by these military installations. However, they know that we have the authority to regulate if they do not. Without retention of this clear State authority, the motivation for this cooperation would be lost.

I will leave the rest of my points in my testimony that I submitted.

Senator CHAFEE. Thank you. That is a good statement and I particularly applaud your final page where you say:

> Before closing, I would like to add that the bill before you does not propose changes to section 404 of the Act. California supports the present language of this section and asks that you deny any attempts to weaken this section.

Mr. WHITNEY. That is true.

Senator CHAFEE. I appreciate that. Thank you, Mr. Whitney. Mr. Pascoe.

STATEMENT OF MONTE PASCOE

Mr. PASCOE. I have a statement on a relatively small point but important point in the amendments to the Federal Water Pollution Control Act. They concern the release of water from a dam and the need to not regulate it as a discharge of any pollutant under the provisions of section 402.

There are several million dams in the country. We have thousands in Colorado. And they play a very important role in our State's life and management of its water resources.

When water is impounded, there are changes in the water's movement flow and circulation. They are particular to the unique circumstances, the topography, climate, and hydrology. Some impoundments can cause the impounded waters to be warmer or colder and have more or less dissolved oxygen than the water would have without the impoundment. These impoundments are neither newly discovered nor particularly significant. Many of our natural mountain lakes display the same characteristics.

A few months ago, a Federal district court in Washington concluded that the Nation's dams, including those in Colorado, had been operated in violation of Federal law for years because they did not have, and four administrations in Washington had advised

them that they did not need, so-called point source discharge permits. We understand that this committee is considering legislation to restore the status quo by overturning that decision.

There is exceptionally strong support in Colorado of a bill to overturn the decision. The general assembly has passed a resolution on this subject and the Colorado Water Quality Control Commission and the Colorado Water Conservation Board have taken similar action.

In our view, neither point source permits nor some new Federal regulatory mechanism for water flowing over dams is necessary or appropriate. First, both Colorado and the balance of the United States have environmental objectives yet to achieve which are far more important than any of the impacts of water flowing over dams. Toxic substances, hazardous waste disposal and similar matters pose much more important environmental, and possibly public health, concerns than do dams.

Senator CHAFEE. I have noticed you discuss water flowing over dams. I agree with you, I see very very good argument that doesn't qualify as a point source, but should require a permit. What about waters that come under the dams to turbines? Are you using the words "over dams" as a term of art?

Mr. PASCOE. I am trying to talk about releases from dams. Water is impounded, some of it flows over, some of it flows through, some of it goes through turbines and other methods.

Senator CHAFEE. So you cover them all?

Mr. PASCOE. We do cover them all in this point because there are ways that you control pollution impacts from the discharge or release of water from a dam and I think that these have actually worked pretty well. They are regulated through control regulations by the State of Colorado. I think a numher of other States have a capacity for control regulations. There are a number of dams that would have to be monitored in the event that we do not overturn this decision or it is not overturned on appeal, but we think that only a few dams out of the millions in the country actually have this problem. And I think it is important here that we use a scalpel on this problem and not a club and not try to use an important mechanism incorrectly and be guilty of administrative overkill.

The experience that we have had in Colorado is that dams have similarly not caused serious water quality problems by themselves. We have had few instances if any where fish kills were being caused by dam induced water quality changes. Even in the event that does occur, as I mentioned before, we have capacity in Colorado, and I think this is true in a number of other States, to use control regulations to regulate this activity.

I have also noted a number of these complaints are about fairly sizable dams. In Colorado we had one instance where we could simply regulate this activity by operating the dam slightly differently than we had before and it took care of the problem of fish kills down below that dam.

I think that we also have to take into account the cost of implementing this program. We have estimated in Colorado that several millions of dollars would have to be spent monitoring our 27,000 dams and properly regulating them if they were point source discharges under section 402. We cannot allocate that kind of money

to this program given the other serious problems that we have in protecting our clean waters in this country.

I think it would be a mistake to expand now—and it is really an expansion even though the court held it was required by the law, to expand our administrative activities under 402 to these dam point sources when those funds can be used elsewhere to much better advantage.

I would like very much to have this committee consider not regulating dams by themselves as point sources under 402 and I want to call to your attention that Senate bill 2779 was recently introduced by Senators Hart and Gorton on this very subject so they would not be regulated as point sources.

Thank you.

Senator CHAFEE. Thank you. I appreciate your coming. This subject you brought up is one that we are going to have a panel on tomorrow which I understand you are unable to attend so we therefore took your testimony today.

Mr. PASCOE. Thank you.

Senator CHAFEE. It makes a lot of sense to me. I am looking forward to hearing what they will say on the other side tomorrow. I think you state a good case.

STATEMENT OF JAMES EDWARD BROWN

Mr. BROWN. Thank you, Mr. Chairman. I am James Edward Brown. I am director of the water quality division of the Iowa Department of Environmental Quality, I am the vice president of the Association of State and Interstate Water Pollution Control Administrators, and I am appearing before you today in that capacity. In addition, accompanying me is Mrs. Robbi Savage who is executive director and secretary-treasurer of that organization.

In terms of some brief comments, I would like to focus on a number of different issues in regard to the proposals.

First of all, I would like to say that we strongly support the position that the Clean Water Act is fundamentally a sound one and shouldn't be subject to dramatic changes. We support a minimum scope of amendments.

The second issue is one of funding. As you might imagine, ASIWPCA supports maintenance of the 106 water quality program funding, at least at current levels that we are talking about for 1982, which are $75 million authorized and $51.2 million appropriated, and Mr. Whitney's testimony supports that position.

I think we feel that partnership implies a commitment of the Federal Government not only in terms of program substance but also in terms of finance. The States have been impacted by regulatory reform and because of that have allowed some relief from detailed requirements as is being claimed by the administration in terms of prior rules. But more important is the concept of federalism which means that the States are, in fact, aggressively taking over programs. We are doing more today than we have in the past. State resources are being committed in the program and I think that shows good faith on the part of the States. But we have to recognize that partnership in all its various ramifications.

Suggestions that 205 (g) and (j) funds offset the proposed cuts I do not feel are appropriate. I think Mr. Whitney's testimony again kind of supports that position. And, more importantly, if you take a look at circumstances, both of these funding sources are tied to the construction grant funds which are also candidates for reduction.

Next I would like to address proposals related to program operation.

Senator CHAFEE. What do you say to Mr. Whitney's point about capture of those States so that those States move rapidly on the expenditure of the funds?

Mr. BROWN. I hope you can appreciate that our association is a group of 50 States and when one State wins another loses. During last year's discussion of the 1981 amendments we had a very difficult time in establishing a position on issues such as the grant allocation formula and I think that is difficult for our association to accomplish.

Senator CHAFEE. Speaking on your other half, as director in Iowa.

Mr. BROWN. As Iowas's director, we feel we need the resources that we have and we would be hard-pressed to give those resources to another State. I prefer to see an alternative that didn't unduly subject States that are relying on those resources to find them disbursed to a different State.

Senator CHAFEE. All right.

Mr. BROWN. From the standpoint of things that relate to the program, the concept of partial assumption of NPD's responsibility over a 5-year period is probably a good start from the standpoint of proposals dealing with the program. But, I think we feel calling for total assumption at the end of 5 years is perhaps unnecessary in that it automatically assumes that every State will fully assume the program. We have always maintained there might be room in the program for partial assumption in the long term.

Another aspect of this type of a proposal dealing with return of certain aspects of the program by the State in circumstances where, say, Federal funding and State funding was reduced and the State was faced with the difficult decision of what it would or could not do with State resources that perhaps it might be desirable to return a portion of the program and not be faced with an all or nothing decision. We think this is a good way to allow for division of resources and enhance the partnership that we are talking about between States and the Federal responsibility.

We would like to see consideration of the revision to allow for 10-year permits. We believe it warrants your consideration. Some reduction of effort would result. The case could be made for stability on the part of permittees' expectation but that might be overstated since issues such as adoption of BAT requirements would mean potential amendments during the permit term. And I think, conversely, that permit reissuance does not always mean the permit would automatically be changed, just that it would be reviewed and any problems might be resolved and the same permit might be reissued. I think the expectations based on 10-year permits are more strongly stated than they might be.

The EPA proposal to charge fees for processing applications for exemptions is a little unclear. We are not sure what its purpose is or its relationship is to prior discussions about fees for permits generally. We are not exactly certain what the relationship is to that earlier position.

The provisions for civil and felony penalties raise issues for State enforcement programs. In adopting these provisions, we want to be sure that they are supportive of the continued State assumption of program responsibility of all aspects of the programs. We are concerned that States are not later required to adopt parallel provisions in order to retain the program.

A third concern relates to provisions to amend particular classes of dischargers' responsibility under the act. Certainly the aspect of expansion of exemptions for various dischargers, particularly defense purposes, is one that we have to take exception to. We can't agree with expanding that provision.

Senator CHAFEE. You are against that. You agree with Mr. Whitney.

Mr. BROWN. Yes, sir.

We feel the present exemptions are adequate to deal with legitimate needs of the defense process. It is also inconsistent, and I think unacceptable, to so greatly broaden allowable noncompliance while we continue to pursue clean water goals with industrial, municipal, and agricultural dischargers. While we recognize legitimate defense needs as Congress already has, we would urge that Government operations should otherwise be responsible for meeting environmental requirements.

In regard to thermal discharges, there were some long and difficult times as section 316 was being implemented. In recent memory there have been no real indication from our members that change was needed.

Senator CHAFEE. Your time is up, Mr. Brown.

Mr. BROWN. In summary, we would like to as well see the Congress deal with the issue of the extension of the deadlines and we would like to be sure that those efforts in fact allow for a reasonable prospect for compliance over that period of time. I think we are getting concerned about about discontinuing extensions, removing the credibility of program and we have to be careful how we structure that.

Thank you.

Senator CHAFEE. Mr. Gordon, we will take a short recess while I go vote.

[Whereupon, a short recess was taken.]

Senator STAFFORD [chairing]. The subcommittee will please come to order. In the interest of conserving time, for Senator Chafee, I will resume the hearing and yield the gavel to him as soon as he arrives.

I understand that Mr. Gordon, who is president of the North American Lake Management Society is the witness on this panel who has not testified and we will invite you to go ahead.

STATEMENT OF THOMAS U. GORDON

Mr. GORDON. Thank you very much.

The North American Lake Management Society is a society of professional lake managers, scientists, and lakeshore property owners who are concerned about our Nation's lakes. Lakes deserve some specialized attention in our Federal water pollution programs because they have some unique water quality characteristics—they are extremely slow to flush out residual pollutants and they are particularly sensitive to overenrichment by nutrients causing a problem of cultural eutrophication which results in nuisance algal blooms. Even with properly designed and constructed treatment plants and industrial dischargers complying with all aspects of the Clean Water Act, lakes might still suffer the effect of water qualify degradation for decades after the pollution sources have been controlled. Therefore, it is extremely important that we recognize this problem and try to develop specialized controls to deal with it.

Lakes are particularly significant as about one half of our Nation's population live within 5 miles of a public fresh water lake. So lakes represent a significant water resource for——

Senator STAFFORD. Might I inquire, were you speaking there nationally or in Maine?

Mr. GORDON. Nationally. The North American Lake Management Society is a national group and we are concerned about lakes throughout the United States.

There are a few sections of the Clean Water Act that directly relate to lake problems. The one that is perhaps most important to us is section 314 of the Clean Water Act which authorizes the clean lakes program. The clean lakes program has provided funding for restoring damaged lakes by a cooperative effort between the Federal Government, State environmental agencies and local governments, and with cooperation from local citizen groups. There have been many lake restoration projects implemented in which local citizens have provided the local match for grants and have utilized a variety of unique fundraising techniques to demonstrate their concern about the lake and their willingness to put their own money into matching the grants to accomplish something in terms of lake restoration.

There are also many examples of successful restoration projects and the agency that I work for in Maine, the Cobbossee Watershed District, provides a good example, and that is Annabessacook Lake in Winthrop, Maine. Ten years ago the lake had visibility in the summertime of about 1 or 2 feet, the water was bright green, there was heavy scum on the surface of the water, and it was totally unusable for recreation, property values were one-half of normal for nearby lakes. With funding from the clean lakes program, we have been able to restore Annabessacook Lake so it now has visibility of 20 feet, only minor algal bloom problems, and increased property values and economic benefits are being realized from the improvement in water quality. This is one example and there are many others in the Nation. There are also many other lakes that have potential for this type of improvement if the clean lakes program is continued.

So, we sincerely urge that you reauthorize the clean lakes program in this amendment to the Clean Water Act.

In addition, we feel there is a need for ongoing national coordination of research and information transfer on lake restoration technology. The field of lake restoration is extremely new and we need some national support from the Environmental Protection Agency in the research and information transfer area, particularly sections 104(h) which provides for research on lakes and section 304(j) which provides for a biannual report on lake quality and methods of like restoration and protection. These two sections are vital to the ongoing effort to improve our Nation's lakes and to improve our understanding of lake restoration technology and we would urge that you would reauthorize those sections.

In addition, we have included in our written statement comments on other sections of the Clean Water Act that have some impact on the lakes and ponds of the United States and we would invite your consideration of the material in our written statement.

In the interest of time, I will stop there and be happy to answer any questions that you might have.

Senator STAFFORD. Thank you very much, Mr. Gordon. Although we are on clean water, in view of your position have you and your associates in the society considered the impact of so-called acid deposition on the quality of lakes across the country, generally in the east in particular?

Mr. GORDON. We are extremely concerned about acid rain; that is one of the two top priorities for our society. We believe that the clean lakes program could in the future be expanded to provide some interim mitigation projects. We certainly favor strong acid rain controls in the Clean Air Act amendments. But, we also see there are a number of lakes that perhaps need some recovery action now or in the next few years while emission controls begin to take effect.

So we would like to see some interim action taken and perhaps the clean lakes program could be the forum for accomplishing that.

Senator STAFFORD. When you refer to the mitigation of lakes, do you have in mind liming the lakes? Is that one of the techniques?

Mr. GORDON. In situations where that is appropriate. Unfortunately, as you know, liming has some real limitations and it is not going to be the long-term answer to the acid rain problem. But, as we hope for strong acid rain controls to come out of this committee this year on the Clean Air Act, we also see that it will take some time to realize the effect of those controls. So we would like some interim action as well and we will be prepared to make some suggestions to the committee at some point on that.

Senator STAFFORD. I guess you are saying it will be difficult to lime Moosehead Lake or Lake Champlain or Lake Ontario?

Mr. GORDON. We don't see that as a long-term solution.

Senator STAFFORD. Neither do I.

What is the cost sharing on the program that we have been discussing?

Mr. GORDON. For restoration implementation projects, the cost sharing is 50 percent Federal and 50 percent from either State or local sources. So there is a substantial local commitment that has to be made. In the last several years a number of States have enacted legislation to match with the Federal grant—Maine, Massachusetts, Wisconsin, and a number of other States are doing this.

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So the clean lakes program has stimulated a great deal of State and local interest. I don't think the states are ready to take over the full financing of the program at this time, but certainly within a period of 5 or 7 years the States could play a greater role in the funding for the clean lakes projects.

Senator STAFFORD. Let me ask the panel, any member who would care to, what will happen to State programs if we accept the administration's request?

Mr. GORDON. For the clean lakes program, we really feel that there would be a great loss of faith on the part of the States. We have contacted a number of States and many have just recently started their own State lake programs in response to EPA's clean lakes regulations which were only adopted in 1980 after the act was originally promulgated in 1972. Now the administration doesn't propose any continuation and many of the States feel that is a breach of faith and would like to see the Federal commitment continue on the lakes area.

Mr. BROWN. From the standpoint of our association, I think the position is generally in support of the program. My own personal experience in Iowa, we have a number of projects under that program and we have had good support both locally and with the States attempting to provide the match money. Earlier on I think the program had some weakness in how project priority was set and what was to be funded. That has been corrected. We now have a strong program identifying restoration capability of lakes and we have established priorities and I think we can do a good job in identifying lakes that are going to be significantly improved.

Mr. WHITNEY. In California, while we have not been plagued with the acid rain problem as you have in the Northeast, it is an emerging problem in California recently discovered and we are concerned. We have not applied any of this money to that problem particularly but we have applied this money to Lake Tahoe which has been our prime example of the use of this program. We would like to have that option but most of our lakes that are in trouble are in urban areas so we hold the urban community responsible for the cleanup in those cases and generally they are very cooperative in trying to do that, but money is a problem at the local level.

Senator STAFFORD. We have been told that the so-called acid rain problem in California is probably based on nitric oxide rather than sulfur oxide, would that be your impression also?

Mr. WHITNEY. Yes. I frankly know very little about that at this point. Our air resources board is taking the lead in our State, but it is my understanding that we are finding a lot more than we thought was present a couple of years ago.

Senator STAFFORD. Thank you.

Senator CHAFEE [presiding]. Let me ask a question on funding for 205 and 104. The suggestion was that, and I forget whose testimony it was, that $55 million would be adequate.

Mr. BROWN. Our position is to maintain at least the same level of funding as we had for 1982 which is $51.2 million.

Senator CHAFEE. Have you found that sufficient? I know you would like more.

Mr. BROWN. I think that the best demonstration of that was probably a study that was done by the States to try to identify

what the needs were in terms of running the water quality program meeting the requirements of the act and I don't recall the specific numbers on that but I believe that the number that was generated was something in the order twice what the actual appropriation was at that time. I would like to also hasten that, in case you question that, the fact is that this study was a very careful analysis, one that was deliberately something other than a blue-sky approach. In other words, not what would you like to do in any case but a fairly structured study to try to evaluate what the real needs were in the program.

Senator CHAFEE. What was that program?

Ms. SAVAGE. It was the study between the staff of ASIWPCA and the solid waste administration worked with the National Governors Association. It was a joint study and we will provide that for your records if you would like.

Senator CHAFEE. We have that, thank you.

Mr. WHITNEY. Let me respond from California's point of view to ask whether that money is adequate or not really begs the question.

A short answer to that literal question is no, it is not enough. In 106, while it does not provide in California the majority of our regulatory effort, it is a key part that allows us to sustain the Federal requirements.

If you do not keep at least the current level or a level thereabouts, we have to seriously consider letting the Federal Government do its own job in California. We have a lot of work to do. I will be testifying this afternoon on ground water and we have got a lot of unexplored territory. The 106 money is directed to that territory. It is a very high priority. So, if you have got to cut money, and we understand that you do, you should not take it from 106, you should find other lower priority and we will be glad to assist in helping to find those lower priorities.

Senator CHAFEE. We are always eager to hear any suggestions you might have on what you would consider to be lower priority.

Fine, Senator Stafford, do you have any further questions?

Senator STAFFORD. No further questions.

Senator CHAFEE. Thank you all very much.

I will now ask the final panel to please come up.

Mr. Smith, why don't you go first and if you have someone with you, if you would identify him we would appreciate it.

STATEMENTS OF JERREL D. SMITH, MANAGER, ENVIRONMENTAL SERVICES, UNION ELECTRIC, ST. LOUIS, MO.; PROF. JOSEPH A. MIHURSKY, CENTER FOR ENVIRONMENTAL AND ESTUARINE STUDIES, UNIVERSITY OF MARYLAND; AND JOHN CLARK, CONSERVATION FOUNDATION

Mr. SMITH. My name is Jerrel Smith, and I am manager of the Environmental Services Department for Union Electric Co. in St. Louis, Mo., I am here today representing the Edison Electric Institute and its 189-member companies. I do have with me, Mr. Chairman, two gentlemen to help answer questions perhaps later on, Mr. Turner Smith, a partner in the law firm of Hunton & William of

Richmond, Va., to my right, and to his right is Dr. Morris Brehmer of Virginia Electric Power Co.

Senator CHAFEE. You have a very lengthy statement.

Mr. SMITH. I would like with your permission, to summarize it.

Senator CHAFEE. Fine.

Mr. SMITH. We do believe that certain modifications can now be made to the Clean Water Act. The administration has forwarded a proposal for amendments, and for the most part we support many of those changes in the Clean Water Act in the administration's package.

However, some of those proposals we do not agree with. In my oral statement I will address only those points contained in the administration's proposal.

We do support the modification of the thermal variance provision of the act and the suggestion to allow the use of alternative mitigating measures under section 316(b) of the act. We also support the administration's proposal to extend the permit term to 10 years. We believe that will be appropriate in light of the fact we are moving now into the best available technology realm of controls. We also support the administration's proposal to clarify the fact that dams do not require NPDES permits. I understand there will be hearings tomorrow on that matter and we will have a representative here to discuss our views, so I won't go into that further.

We oppose the administration's proposal regarding the imposition of civil penalties. We think there is a serious problem there, and the provision is rather ambiguous. We think EPA has adequate provision for enforcing the Clean Water Act and until it is demonstrated that there is a serious need for change, we could not support that proposal.

I would like to focus on the thermal question. As I am sure you know that is a very important issue to this industry. We would support a change to the thermal variance 316(a) portion of the act that would allow variances to be granted based on a demonstration of compliance with water quality standards. This is particularly important to new sources because, as I am sure you are aware, new sources have to commit to a specific design in their cooling system very early in order to carry out the construction of a plant. Under the present scheme of things, one is required to do a very extensive biological study to obtain a variance. The process of conducting and reviewing the results of those studies is quite lengthy and generally would prohibit a new source from making a decision to choose to make a demonstration under 316(a) as it now stands. We believe that compliance with thermal standards would provide a very easy and good means of demonstrating compliance with section 316(a).

Cooling towers are considered now, I suppose, to be the best technology for removing heat. However, there are certain things about cooling towers that are not so desirable here one can safely use on-stream cooling. First, they do cost a lot of money, up to perhaps $75 million for a 1,000-megawatt station. In a station of that kind, in addition, they would cause the use of an additional 50,000 tons of coal per year because of the impact on the efficiency of that plant. They evaporate about 2½ times more water than would on-stream cooling, and there are certain other environmental impacts

that they can have. We would suggest that where one can safely use onstream cooling, we should do that.

The industry, since 316(a) was written into the act in 1972, has gained a lot of information as a result of that section of the act. There have been about 150 biological studies performed by this industry on the effects of discharges from powerplants that are really now showing that the thermal discharge is not the question and not the problem we once thought it might have been. I think we can change the act now to reflect this experience.

EPA has approved or conditionally approved 162 of these variances to date while rejecting only four on the basis of insufficient information. I think this is good evidence that that thermal question is now being resolved.

We have the information, I believe, to move toward modifying the act and simplify that process in a way that will save us as much as $2 billion in this industry between now and the year 2000 in terms of capital expenditures that would otherwise go into cooling towers unnecessarily.

Mr. Chairman, that basically highlights those points that I made in my prepared statement and we will try to respond to your questions. Thank you very much.

Senator CHAFEE. Fine. Let's take Professor Mihursky and then we will have some questions for each of the members of the panel.

STATEMENT OF JOSEPH A. MIHURSKY

Mr. MIHURSKY. Thank you, Senator. I am Joseph A. Mihursky, a professor at the University of Maryland, Center for Environmental and Estuarine Studies. I have been working in the areas of thermal effects probably for about 25 years. Specifically I function in the university with applied ecology and a great deal of my effort with pollution ecology. I might also say, I have had 200 publications and technical reports put out in the area of marine biology.

I want to address the proposed EPA amendments concerning thermal discharge. I want to start off by trying to respond to a point that Mr. Smith made that the effects of thermal discharges have not been as substantial as we originally thought would be. My reply, the reason thermal effects have not been as damaging as we originally anticipated was because of the role the Federal agencies have played in terms of regulation. They have done good and I think the existing Federal regulations which are in place are proof of the pudding. And I would hope that Federal leadership can be maintained on these environmental issues. Environmental issues don't know State boundaries.

And concerning temperature, it is widely recognized in the field of biology and aquatic biology, temperature is a massive factor, it regulates everything. We shouldn't let that escape us.

Concerning the proposed modifications, there is a point in 316(a) that says that the protection and propagation of balanced population of shellfish, wildlife in and out of the body of water, a word has been eliminated, and the word is "indigenous." It should read: "the proposed propagation of a balanced indigenous population * * *".

What that says, we are trying to maintain the national stocks that existed before this proposed engineering facility was put in place. We are saying we would like to have that system function as naturally as possible. They continue to produce for us a like quantity of useful logical stuff. If you eliminate the word "indigenous" you open the door for interpretation of what constitutes a balanced population and you open the door for man to try to artificially construct a natural system. I dare say, man has managed to do that successfully. I think we are running the risk if we eliminate the term "indigenous."

Second, in 316(b) section, they have another option. It says: "Or that equally effective measures be applied either alone or in combination with best available technology to minimize adverse environmental impact."

I think what is meant here, the intention is that, all right, if we have effects and we lose 100,000 stripe bass a year, can we replace that with a like quantity of other material? And I think we are running the risk now to go that direction in terms of how to properly mitigate. I am reluctant to say that it is desirable to continue to lose natural systems. I appreciate the argument that if you knew how to manipulate natural systems, alter the structure of the various populations and communities, that these structures will produce a like quantity of useful biological stuff you can argue this might not be a bad way to go. I dare say, we can't do that yet. We don't know enough to be able to say we are going to put together a new structure and it is going to function just as well. It is a danger and risk that we have. I prefer to see indigenous replaced with 316(a). And I am just expressing my concern about opening the door to mitigation and weakening the regulations they presently have.

I think that is all I have to say right now. Thank you.

Senator CHAFEE. Thank you.

Mr. Clark.

STATEMENT OF JOHN CLARK

Mr. CLARK. Thank you. My name is John Clark. I live in Hollywood, Md. I have for 30 years worked with marine and aquatic biology and analyses. This has been principally with the U.S. Fish and Wildlife Service, the Bureau of Commercial Fisheries and the Conservation Foundation in Washington, D.C. I have been involved with powerplant water problems for 18 years on and off starting with storm drains in 1964 in the Hudson River. I have been involved with Indian Point, Vermont Yankee, and many others. I have written some on the subject, including the wildly publicized warning on thermal pollution in the late sixties and the first comprehensive review of environment pollution. I was deep into this business when in 1972 Water Act was passed and I was around when the 316(a) and (b) regulations were developed and the implementation was begun, and finalized on October 8, 1974 and April 26, 1976.

There were hard times in reaching the understanding and compromises necessary to get the 316 program going, but I believe we can be satisfied with the accomplishments made by EPA and its

programs to date. It looked like mission impossible when we started.

The matter being considered today is whether this program so painstakingly designed and so expensively researched shall disappear, shall not be allowed to function, not given a chance to operate and to throw the program back into the dark ages of uncertainty.

Specifically, there are proposals to eliminate the indigenous population of species in public waters and to weaken the BAT requirements and substitute for them the ambiguity of mitigation.

In my opinion these proposals should be rejected and the 316 program left intact. I have got my problems too with the program, but I don't think it is time for a sweeping change. I think it would be inappropriate of me to suggest that the 316 program be reworked now to get the greater protection of our streams, lakes, and estuaries that I would like to see, and I believe it would be less appropriate to change it to weaken the protection futures that it has. I will give my reasons.

The requirement to maintain a balanced indigenous population was carefully thought out by the drafters of section 316. The concept is that public waters or streams or lakes and estuaries shall remain productive of native species. Indigenous means native. It was used in 316(a) in response to argument by certain power interests that went like this: If a river gets too hot for the species here in New England, we can bring in subtropical species that like hot water, create a giant tropical fish lake in the northern lakes and rivers, believing that such an idea was impossible and philosophically unacceptable. Congress developed the concept that we will protect our water sufficiently to assure balanced native population of shellfish, and wildlife.

Behind the debate over indigenous is not a technical or semantics problem but a point of simplification of regulation. Behind it is a strong division of ideology and conceptual divergence.

The indigenous concept of 316(a), if you do that, you opt to keep the stripe bass in the Hudson, keep the salmon in the Columbia, keep the trout in the Rocky Mountain streams, and the small mouth bass in Kentucky streams. That is what indigenous means.

Balanced means you keep the natural population of bait fish, plankton, and shrimp in some semblance of order so there will be suitable conditions and ample food for the trout, salmon and bass.

At its greatest extreme, nonbalanced and nonindigenous would mean you make each natural water body into a giant acquarium for exotic fishes—(shark or anglefish)—which you then have to feed everyday. The cost would be enormous. Of course, this is an exaggeration, but it demonstrates the possibility.

The truth is that it is technically possible, as well as very desirable, to keep that native fish in our streams supported by a natural food supply. This can be done by sticking to our guns on 316.

Moreover, to eliminate the concept of indigenous would not unconfuse matters, it would throw them into chaos. For example, I could easily describe the composition of an indigenous population for the Apolachiola River in Florida, but I wouldn't have any idea what a nonindigenous population would be made up of. It could be

any unnatural combination of species. The result would be ecological anarchy.

To talk a minute about 316(b), pushed by the program, the industry is coming up with some pretty good technology, not just cooling towers and ponds, but screens, diversions and other protective devices. In other words, BAT is working. BAT is and should be the cost of doing business in the public waters. BAT also makes for simple regulatory program. I do not know of any simpler, more reasonable, approach.

Some people are pushing for mitigation as an alternative to BAT and that is what EPA has in mind in this proposed amendment. Other effective measures, as they say, to minimize adverse environmental impact simply means mitigation. By this approach a powerplant would be allowed to deliberately cause harm to waters so long as they pay compensation or arrange themselves to compensate for the harm. An example would be to run a powerplant wide open and then pay a hatchery to raise new fish that could be put back in the water body to replace the killed.

Senator CHAFEE. This is mitigation you are talking about?

Mr. CLARK. Yes.

Senator CHAFEE. Mr. Clark, your time is up, so you got to wind up here, if you would.

Mr. CLARK. I would simply add that much of the other experience that we had have hatcheries such as on the Columbia River shown that they don't really work in the real world and that we are better off sticking with what we got. Thank you.

Senator CHAFEE. Thank you.

I got a couple of questions of Mr. Smith.

Do I understand that the 316(a) regulations have been knocked out by the courts?

Mr. SMITH. No. Those are fully in force. 316(a) allows you to make a demonstration not to apply a best technology, presumed today to mean cooling towers principally, and we are not suggesting a change to that.

What we are suggesting is we now have learned in these past 10 years that compliance with thermal standards protects the balance of the population in those streams where cooling is used onstream. We have a lot of these variances for existing plants that have not yet been approved but what I am suggesting is, on the basis of new information, we advance to the stage of allowing a simpler, quicker, but yet an addition method of approval for those new sources where maybe cooling towers would not be as desirable to have. For example, on the Mississippi River, I think there are some folks that would be unhappy if I installed a cooling tower in some places on that river where there is a large amount of water, but did so only because time does not allow me to go through this process of demonstration and review by the agencies in a fashion that I can introduce on-stream cooling into my design and construction of that powerplant.

I do want to make it clear, we are not suggesting you eliminate 316(a), but to use thermal water quality compliance as a mechanism to obtain those variances in a shorter period of time.

Where best technology is required, then we will apply that, of course. That is what our intent is.

Senator CHAFEE. You have heated water in the Mississippi?

Mr. SMITH. It is not that. On that body of water there is adequate means of not affecting the river per se. I have been in that river trying to find a plume from our powerplant and it is very difficult to find. There is a lot of good water for cooling available.

The point I am making is in those cases where the Nation's industry can use those resources at less cost and perhaps do no more harm or less harm than the cooling tower would cause, then we should move to allow that to be done. The esthetic effects of cooling towers would be undesirable in the particular instance that I am thinking of. As I pointed out, we have predicted that if the thermal compliance would be based on compliance with water quality standards, if we can qualify it that way, the industry could save $2 billion by avoiding the investment in cooling towers.

Senator CHAFEE. Do you have a big growth projected to have that saving of $2 billion?

Mr. SMITH. No. I think the growth rate in that prediction is somewhere in the range of 3 percent through capacity replacement and power growth. That study is submitted for the record and your staff can go through that. Incidentally, we will be happy to meet or talk with your staff regarding those questions at any time.

Senator CHAFEE. How many facilities are affected by 316(a)?

Mr. SMITH. I can't say that all facilities are, but many existing facilities are affected by 316(a) and most of those studies have been completed, and I guess most questions on those have been settled. I am sure there are some outstanding variances not yet acted on, but I am principally addressing the new source question where you have to demonstrate no significant biological harm based on a set of studies and a hearing and permitting process which takes perhaps 3 years. That makes it very difficult to try to design a plant and wait for approval. You simply cannot afford to wait for those studies to be done. If you can demonstrate water quality compliance, those agencies that have authority to overview that and grant variances can make those decisions more quickly.

Senator CHAFEE. Senator Stafford, do you have any questions?

Senator STAFFORD. Thank you, Mr. Chairman.

In connection with the cooling towers that has been the subject of some discussion, how much power output, if you can tell us, of the 1,000 megawatt powerplant would be consumed as a result of the present use of cooling towers?

Mr. SMITH. Through the present use?

Senator STAFFORD. Yes.

Mr. SMITH. Senator, I can't answer that question. We will try to provide that.

Per unit on a 1,000-megawatt unit?

Senator STAFFORD. I was trying to get an answer that would indicate how much of the 1,000 megawatt had to be devoted.

Mr. SMITH. We have about 3-percent capacity loss and somewhere around 2-percent energy loss. On the basis of 60-percent capacity factor with 1,00 megawatts you would consume 50,000 tons of coal a year to drive your cooling tower system.

Senator STAFFORD. If BAT standards for the utility industry were not set this year, would it be reasonable to extend the NPDES permit term?

Mr. SMITH. I am not sure I am clear on your question.

Senator STAFFORD. Let me suggest that we will submit the question to you in writing.

Mr. SMITH. Yes, sir.

Senator STAFFORD. That leaves me to turn to Mr. Mihursky or Mr. Clark. Are our streams and watercourses currently being adequately protected under the thermal pollution provisions of existing law?

Mr. MIHURSKY. I can address that in terms of my knowledge concerning the State of Maryland. The State of Maryland put into effect the powerplant program that places a surcharge charge in every kilowatt used by users and they have put into effect a substantial team of experts coupled with university professors and consultants to try to determine the best fit of powerplants and where you have your electricity and water quality. I think it demonstrates that with these appropriate regulations and with the expertise you can do a very good job, yes. I think they have done a fine job. Unfortunately, you don't see that occurring in all States.

Senator STAFFORD. Mr. Clark, do you have any further comment?

Mr. CLARK. I think we should all be quite satisfied with the technological investment in the way in which the industry has responded and the inventions and creations that have come about in the last 10 years. I think we are making very good progress toward getting the maximum that we can out of rivers in terms of power and still keeping them together ecologically.

Senator STAFFORD. Thank you.

Thank you, Mr. Chairman.

Senator CHAFEE. What is the temperature that you discharge at normally? What would it be absent cooling towers?

Mr. SMITH. The thermal standards apply to mixing zones and incremental increases in that mixing zones, in most cases not to be increased more than 3° at any time and usually not to be increased above a certain temperature within that stream. That, I think, is generally the range of increasing temperatures you would find, 1° to 3° with a cap.

Senator STAFFORD. Can I follow up on that?

Senator CHAFEE. Sure.

Senator STAFFORD. That means that the discharge temperature from a plant has to be varied, I would think, in connection with climatic conditions. In my own State I can think of one nuclear plant that is discharging into a water source in which the temperatures of the water vary sharply from winter when it is close to freezing to summer when it is up to around 70°. So that means, if I follow you, that you would not want to raise the water temperature by discharging in this particular instance more than about 3° in temperature.

Do I understand you on that?

Mr. SMITH. Let me see if I can clarify that. You will find, I think, that differential temperatures rise in that small amount of water that goes through your powerplant in the range 20° to 30°. In your river you are provided with a mixing zone and outside that mixing zone you would not be above 3° or something in that range. That is an example based on a lot of water quality standards I have seen. Given the same flow, summer and winter, and given the same flow

through the powerplant summer and winter, the incremental temperature rise will be exactly the same in your stream, even though you may be 33° in the wintertime and 75° in the summertime. The incremental increase in temperature will be the same.

Senator CHAFEE. That is curious and you bring in cold water and you circulate it around to cool and in the winter it rises 3°, you bring in hot water and you circulate it to cool in the summer and it rises 3°?

Mr. SMITH. Yes. It is the amount of heat that you are rejecting to that water body. Given the same flows it will have the same temperature rise regardless of the temperature of that stream.

Senator STAFFORD. Thank you.

Senator CHAFEE. You control it so it doesn't go above 3°?

Mr. SMITH. That which goes through your condensers will rise more than that.

Senator CHAFEE. But you make certain that it doesn't go over 3°?

Mr. SMITH. You would make certain that river water temperature doesn't go over 3° based on the flow. This is a stream standard. Let's take a powerplant operating at full load and has perhaps a 20° rise condenser, that is fairly standard of a system today. If you can meet your thermal standards in the summer, you can meet those in the winter or vice versa, given the same flow. What you generally do in looking at the design of a system for on stream cooling is to take the minimum flows that were experienced on that stream and develop your design around those minimum flows, and demonstrate at those minimum flows that those stream standards will be maintained.

Senator CHAFEE. Thank you. You have given us food for thought. Thank you, gentlemen.

That concludes the hearing.

[Whereupon, at 12:30 p.m., the subcommittee recessed, to reconvene, subject to the call of the Chair.]

[Statements submitted for the record follow:]

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United States Senate

COMMITTEE ON APPROPRIATIONS
WASHINGTON, D.C. 20510

July 27, 1982

The Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Environment and Public Works Committee
United States Senate
Washington, D. C.

Dear John:

Enclosed are copies of documents submitted to my office by the City of Milwaukee. I would appreciate it if these documents could be made part of the hearing record for July 28, 1982 on the subject of the Federal Common Law of Nuisance.

Thank you so much for your consideration.

Sincerely,

William Proxmire, U.S.S.

THE PROPOSED STAFFORD AMENDMENT

TO

THE CLEAN WATER ACT
(FEDERAL WATER POLLUTION CONTROL ACT)

Senator Stafford (R.Vermont) proposes to revive his 1981 effort to amend the Federal Water Pollution Control Act ("FWPCA") so as to inject the federal courts into water pollution control by reversing the United States Supreme Court's 1981 decision in Milwaukee v. Illinois, 541 U.S. 304.

Enclosed is a position paper which details how FWPCA provides a complete system for protecting the nation's waters from pollution. As the Supreme Court held, resort to court application of common law is neither appropriate nor necessary. The paper reflects that FWPCA's comprehensive permit system administered by the United States Environmental Protection Agency, controls the discharge of each and every pollutant to any navigable water from any point source. Each pollutant source must secure a permit before it may discharge any pollutant into the nation's waters.

FWPCA and EPA regulations provide goals, timetables and standards as well as procedures for establishing permit terms and conditions, procedures which include the participation of neighboring states and all other interested parties to assure that all valid concerns are met.

Enactment of any proposal which superimposes resort to court-made common law would seriously interfere with the orderly administration of FWPCA's permit system, and threaten

the achievement of FWPCA's uniform federal goals. The prospect of court interference with the uniform application of FWPCA by applying federal common law, where, as the Supreme Court said in Illinois v. Milwaukee, 406 U.S. 91 (1972), there are "no fixed rules," can only detract from the assurances of uniformity and finality which FWPCA's permit system is designed to provide. As the Supreme Court correctly observed, FWPCA established a "comprehensive regulatory program supervised by an expert administrative agency...there is no room for courts to attempt to improve on that program with federal common law."

Senator Stafford, the principal supporter of injection of the courts into the system on an independent basis, states that revival of the federal common law is needed to supplement what he alleges is an incomplete regulatory scheme provided by FWPCA, a position in large part based upon review of particular permits having few stated pollution parameters. We point out that permits specifically deal with the pollutants present; they need not deal with pollutants not present. Additionally, anyone concerned that specific pollutants will not be considered need only appear and assure consideration in the permit proceeding. FWPCA is a comprehensive scheme of regulation which thoroughly and effectively controls pollution of the nation's waters. There is no longer need for the federal common law and accompanying judicial lawmaking.

POSITION PAPER

THE FEDERAL WATER POLLUTION CONTROL ACT THOROUGHLY PROTECTS THE NATION'S INTEREST IN WATER POLLUTION CONTROL

I. STATEMENT OF POSITION

Since the decision of the United States Supreme Court in the case of Milwaukee v. Illinois, 451 U.S. 304 (1981), some consideration has been given to amendment of the Federal Water Pollution Control Act of 1972 ("FWPCA" or "the Act"), 33 U.S.C. §1251 et seq., as amended, to revive the federal common law of nuisance. Any consideration of such an amendment to the FWPCA presupposes gaps in the existing statutory scheme, since the courts are not called upon to create federal common law unless Congress has not addressed the area of concern. This principle was discussed in Milwaukee v. Illinois, where the court stated the issue as "whether the legislative scheme '[speaks] directly to a question'", or whether there exists some "'interstice' to be filled by federal common law." Milwaukee v. Illinois, 451 U.S. at 315 and 324, n. 18 (1981). In the absence of such an "interstice", "the need for such an unusual exercise of lawmaking by federal courts disappears." Milwaukee v. Illinois, 451 U.S. at 314.

This paper will illustrate that the comprehensive water pollution control scheme adopted by Congress in 1972, and subsequently amended, is complete and that no gaps exist in the scheme. Indeed, "there is no room for courts to attempt to improve on that program with federal common law." Milwaukee v. Illinois, 451 U.S. at 319.

II. THE CORNERSTONE: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

The major purpose of the 1972 FWPCA was "to establish a comprehensive long-range policy for the elimination of water pollution." S. Rep. 92-414, at 95, 2 Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1 at 1511. The discharge permit system is key to that policy. Weinberger v. Romero-Barcelo, 50 USLW 4434 (April 27, 1982).

Under the Act, the "discharge of any pollutant" to navigable waters is unlawful unless permitted under the NPDES. 33 U.S.C. §1311(a). The statutory definitions and regulations promulgated under the Act to implement this permit program are so comprehensive that a) all sources of pollutant discharges to navigable waters are regulated, b) discharges of all pollutants of concern are limited and c) the rights of all parties with any substantial interest affected by a given discharge are protected.

A. All discharges to navigable waters are regulated.

The Act regulates the "discharge of a pollutant" which is broadly defined to mean "any addition of any pollutant to navigable waters from any point source" and "any addition of any pollutant to the waters of the contiguous zone of the ocean from any point source other than a vessel or other floating craft." 33 U.S.C. §1362(12). The effect of this definition turns on the definition of the term "point source", which is "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or

may be discharged. This term does not include return flows from irrigated agriculture." 33 U.S.C. §1362(14). On its face, then, the statute aims to regulate virtually every conceivable source of pollutant discharges, with the exception of one (irrigation return flows).

In fact, the courts have affirmed the scope of this definition by interpreting the term "point source" quite broadly. See, for example, U.S. v. Earth Sciences, Inc., 599 F.2d 368, 374 (10th Cir. 1979) (holding that intermittent discharges of sodium cyanide-sodium hydroxide leachate solution from a reserve sump in the circulating drainage system in a gold mining operation were discharges from a "point source"); Sierra Club v. Abston Construction Co., Inc., 620 F. 2d 41, 45 (5th Cir. 1980) (holding that "a point source of pollution may also be present where miners design spoil piles from discarded overburden such that, during periods of precipitation, erosion of spoil pile walls results in discharges into a navigable body of water by means of ditches, gullies and similar conveyances, even if the miners have done nothing beyond the mere collection of rock and other materials.") Recently, the District Court for the District of Columbia held, in the case of National Wildlife Federation v. Gorsuch, 530 F. Supp. 1291 (D.D.C. 1982), that a dam and reservoir are point sources which discharge pollutants within the meaning of the Act, and are, therefore, subject to regulation under the NPDES.[1/]

[1/] This case is particularly interesting since EPA's position was that the dam was not a point source. The court disagreed with the Agency's interpretation of the statute, quoting from Natural Resources

Under the Act, two major classes of point sources are created: publicly owned treatment works (POTW's) and all other point sources, which, for convenience, are generally called "industrial" point sources. All pollutant dischargers fall into one of these classes, and none are left unregulated. For the larger, "industrial" class of point sources, the U.S. EPA has promulgated technology-based effluent limitations for forty-two classes of industrial discharges which discharge directly to surface waters. 40 CFR Parts 405 through 460. These regulations prescribe specific effluent limitations for classes of dischargers ranging from the iron and steel industry to leather tanning. These regulations prescribe limitations on all types of discharges, including process discharges, non-contact and contact cooling water discharges, and stormwater runoff collected in materials storage areas (i.e., coal pile runoff) for discharge. Those "industrial" sources which discharge to POTW's, rather than directly to navigable waters, are required to meet pretreatment standards established by U.S. EPA under Section 307(b)(1) of the Act. 33 U.S.C. 1317(b)(1).

(Footnote 1/ continued)

Defense Council v. U.S. Environmental Protection Agency, 656 F2d 768, 774 (D.C. Cir. 1981): "Our duty is to see that the congressional mandate is carried out, and misinterpretation of that mandate will be corrected ... where the Administrator's interpretation of the Act coincides with the purpose and intent of the statute we defer to his construction ... however, no amount of deference can justify an interpretation that is contrary to law." National Wildlife Federation, supra at 1311. Thus, under the federal statutory scheme, the courts maintain an active role in water pollution control matters.

Publicly owned treatment works are defined in Section 212(2)(A) and (B) of the Act, 33 U.S.C. 1292(2)(A) and (B), to mean "any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature ... or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances;" and "any other method or system for preventing, abating, reducing, storing, treating, separating or disposing of municipal waste, including stormwater runoff, or industrial waste, including waste in combined stormwater and sanitary sewer systems."

Discharge permits currently applicable to the Milwaukee metropolitan area sewerage system are a good example of the all-inclusive nature of this definition. All municipal wastes generated in the Milwaukee metropolitan area are treated at either of two treatment plants, both of which discharge to Lake Michigan. Each plant has a single outfall, or discharge point, at which effluent limitations are applied. Copies of the two discharge permits are attached. The Jones Island (JI) Wastewater Treatment Plant Permit (Exhibit 1) contains the effluent limits for its outfall at Part I, p.3. The South Shore (SS) permit (Exhibit 2) also contains the outfall limits

at Part I, p. 3.[2/] In addition to the main plant outfall, each permit identifies all known overflow points in the sewage collection system tributary to each plant (JI, Part II, p. 1; SS, Part II, p. 1). These are not points of continuous discharge, but are points where discharges may occur (even if only rarely) in wet weather conditions.

These overflow points are either to be eliminated by a fixed date or to meet specified effluent limitations. (JI, Part II, p.2; SS, Part II, p. 1). In addition, the South Shore Plant has an outfall which is used as an emergency bypass only in the event that the design flow of the plant is exceeded (in wet weather) and the plant is in danger of equipment damage. This outfall is also regulated under the permit. (SS, Part II, p.2).

In addition to these two plant discharge permits, the Wisconsin Department of Natural Resources has issued permits regulating overflow points to each municipality in the Milwaukee metropolitan area.[3/] Such a permit has been issued to the City

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[2/] Both the Jones Island and South Shore discharge permit have been amended since the date of original issue to reflect regulatory changes. The exhibits here do not reflect these amendments since they are not material to this discussion.

[3/] Under state law, the treatment plants, along with the main intercepting sewer system are owned and operated by the Milwaukee Metropolitan Sewerage District. The local sewage collection systems are owned and operated by each respective municipality.

of Milwaukee. That permit effectively regulates all two hundred forty-four known overflows and crossovers within the City's sewer system. A copy of that permit is attached here as Exhibit 3. Again, these overflow points have only intermittent discharges. Part I of the permit identifies the location and size of each overflow point and crossover. Part II, Sections A and B of the permit establishes interim discharge reporting, effluent limitations, and monitoring requirements. Part II, Section C sets the final (effective July 1, 1983) requirements for discharge reporting, effluent limitations and monitoring. Thus, every known discharge point, regardless of frequency of use, is regulated.

The specific limitations set in this permit have been challenged by the City of Milwaukee. Likewise, the Milwaukee Metropolitan Sewerage District disputes the limitations set for its overflow points. Both permittees challenge the Wisconsin Department of Natural Resources' position that overflow points are POTW's subject to secondary treatment standards. At least one federal circuit court concurs with the permittees' position. Montgomery Environmental Coalition v. Costle, 646 F.2d 568, 592 (D.C. Cir. 1980). The dispute is not whether these overflow points are to be regulated under the permit system, but to what extent. The issue of what specific effluent limitations to apply to a point source category is properly and completely resolved during state and federal rulemaking and permit proceedings under the FWPCA.

Under the Act, each and every point source discharge, whether continuous or intermittent, must be specifically authorized by a permit. In accord with the Act, the Wisconsin Department of Natural Resources, in the Milwaukee case, has issued permits

which regulate every single known discharge point within the municipal sewerage system. The Milwaukee case is but one example of the comprehensive scope of regulation established under the FWPCA.

B. All Pollutants of concern are subject to effluent limitations.

Given that all point source discharges are susceptible to regulation under the Act, the question becomes whether all pollutants originating from those sources are effectively limited under the NPDES. An examination of the provisions of the Act, the regulations issued under it, along with a review of the Milwaukee example, clearly shows that all pollutants of concern are effectively limited.

Under the Act, the definition of "pollutant" includes "... dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked, or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water ...." 33 U.S.C. §1362(6). It is difficult, if not impossible, to conceive of a substance which would not be included within this definition. The courts have consistently construed this definition broadly. See, for example, U.S. v. Velsicol Chemical Corp., 438 F. Supp. 945 (1976) (holding pesticides endrin and heptachlor are "pollutants"); U.S. v Weisman 489 F. Supp. 1331 (1980)(holding fill material dumped and spread on property for road construction was a "pollutant"). Recently, the Supreme Court ruled in a case in which the district court found that the release during military training of ordnance from aircraft or from ships into navigable waters is a discharge of

"pollutants" within the meaning of the FWPCA. Weinberger v. Romero-Barcelo, supra (1982).

Two basic categories of pollutants are specifically identified under the Act. "Conventional pollutants" include biological oxygen demand (BOD), suspended solids (SS), fecal coliform, and pH. 33 U.S.C. §1314(a)(4). "Toxic pollutants" are defined in Section 301(a)(2)(C) of the Act as those identified in Table 1 of Committee Print No. 95-30 of the Committee on Public Works and Transportation of the House of Representatives (these are often called the "priority" pollutants), along with all toxic pollutants added to that list under Section 307(a) of the Act, 33 U.S.C. 1317(a). This list of toxic pollutants contained in Committee Print No. 95-30 was compiled by U.S. EPA as the result of a lawsuit brought by the Natural Resources Defense Council, NRDC v. Train, 8 ERC 2120 (D.D.C. 1976), to compel that Agency to establish effluent limits for toxics, and, as a result, is considered to be a comprehensive listing of known toxic pollutants. If a toxic pollutant is not listed currently, the Agency may, under the Act, add to the list.

Finally, a catch-all provision of the Act requires that all pollutants not included within either of the two specified categories be limited. 33 U.S.C. §1311(b)(2)(F). All pollutants not listed as conventional or toxic fall into this miscellaneous group. Examples are phosphorus, heat and chlorine.

For each category of point sources previously discussed, the U.S. EPA is authorized under Section 301 of the Act, 33 U.S.C. §1311, to set effluent limitations. Effluent limitations are set for those pollutants generated by each particular category of point

source and are applied to individual sources through the NPDES permit for that source. To date, U.S. EPA has established effluent limitations for publicly owned treatment works, 40 CFR Part 133; for forty-two industrial point sources, 40 CFR Part 405 through Part 460; and for toxic pollutants (regardless of source), 40 CFR Part 129. In addition, according to U.S. EPA's Semi-Annual Regulatory Agenda (47 FR 15702, April 12, 1982), additional effluent limitations are currently proposed for at least twenty-eight categories of point sources.

Finally, if federal effluent limitations do not exist, or if a state wishes to impose limitations more stringent than the federal standards, the Act provides the state with sufficient authority to impose the necessary restrictions. For example, in the Milwaukee Metropolitan Sewerage District permits discussed previously, the Wisconsin DNR has imposed phosphorus and fecal coliform (weekly) effluent limitations which are based upon state water quality standards. (JI, Part I, p.3; SS, Part I, p.3). These limitations were imposed since no federal effluent limitations exist. The limitations are "tailored" to take the characteristics of the receiving water, i.e., Lake Michigan, into account.

Under Section 301(b)(1)(C) of the Act, 33 U.S.C. §1311(b)(1)(C), all point sources are required to meet "any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any state law or regulations, (under authority preserved by Section 510) or any other federal law or regulation, or required to implement any applicable water quality standard established pursuant to this Act." This requirement is enforced regardless of whether the state or U.S. EPA is the permit issuer,

since under the FWPCA the U.S. EPA may not issue an NPDES permit without state certification that the permit conforms to state water quality standards. A state has the authority to deny certification of the permit or attach conditions to the final permit. 33 U.S.C. §1341. The net effect of this requirement is that all pollutants, whether or not they are regulated by federal effluent limitations, are subject to a state's certification that all of its water quality standards, or other pollution control requirements, will be met by the permitted discharge.

In the event that no federal effluent limitations or state water quality standards exist for a particular pollutant or class of point sources, the U.S. EPA is authorized under Section 402(a)(1), 33 U.S.C. 1342(a)(1), to issue a permit which will meet "such conditions as the Administrator determines are necessary to carry out the provisions of this Act." In accord with this authorization, the federal permit regulations provide that "each NPDES permit shall include conditions meeting ... technology-based effluent limitations and standards based on effluent limitations and standards promulgated under Section 301 of FWPCA ... on case-by-case effluent limitations determined under Section 402(a)(1) of FWPCA, or on a combination of the two ...." 40 CFR §122.62(a). Thus, if a void exists in the effluent limitation regulations, in respect to a particular pollutant source, the U.S. EPA is authorized to establish standards for that source through the permit process.

Another examination of the Milwaukee Metropolitan Sewerage District permits shows how the various federal effluent limitations and state water quality standards are applied to a real discharge

to achieve the total regulation contemplated by the Act. The effluent limitations for the Jones Island Plant are found at Part I, Page 3 (Exhibit 1). The source of each effluent limitation is as follows:

POLLUTANT	BASIS OF EFFLUENT LIMITATION
BOD_5 (monthly)	40 CFR Part 133.102
BOD_5 (weekly)	40 CFR Part 133.102
Suspended Solids (monthly)	40 CFR Part 133.102
Suspended Solids (weekly)	40 CFR Part 133.102
pH	40 CFR Part 133.102
Residual Chlorine (daily)	Wisconsin Administrative Code Ch. NR 210
Fecal Coliform (monthly)	Wisconsin Administrative Code Ch. NR 210
Fecal Coliform (weekly)	Wisconsin Administrative Code Ch. NR 102 (Water quality standard based effluent limitation)
Total phosphorus (monthly)	Wisconsin Administrative Code Ch. NR 102 (Water quality standard based effluent limitation)

The permit applies the more stringent of either federal or state standards to the Jones Island Plant discharge. In addition, the permit imposes the same combination of federal and state standards upon overflow points (Exhibit 1, Part II, p.1). In accord with state and federal law, this permit is tailored to the specific requirements of the particular circumstances involved, and thus limits the discharge of every pollutant determined by state and federal agencies to be discharged in significant quantity. (Under FWPCA, permits only address pollutants present in the discharge under consideration; thus permits issued to different dischargers will contain limitations appropriate to

the needs of each case. In some instances there will be many pollutants present and hence numerous specific limitations; in other instances - like the Milwaukee case - there are only 5 or 6 pollutants present in any significant quantity. Anyone concerned about the control of specific pollutants may of course participate in the permit proceeding.)

In addition to regulation of the treatment plants' discharges of pollutants to surface waters, the permits regulate disposal of sludges generated in the wastewater treatment process. Methods of sludge disposal must be reported, along with results of physical and chemical analyses of sludge. (JI, Part II, Section B, p.1; SS, Part II, Section B, p.1). The permit also contains pretreatment requirements for industrial sources which discharge wastes to the sewerage system.

C. The rights of all interested parties are protected.

Since it may be concluded that the Act regulates all sources and all pollutants, the only remaining area in the statutory scheme to be examined for inadequacy is the area of protection of rights of interested parties. As will be shown, the Act thoroughly protects the rights of all interested parties.

Under Section 309 of the Act, 33 U.S.C. §1319, primary enforcement authority rests with state pollution control agencies where they have been delegated the permit issuing function. U.S. EPA retains enforcement authority in states where it continues to issue NPDES permits. The agencies are authorized to bring civil actions to enforce the requirements of discharge permits; U.S. EPA is authorized to issue compliance orders. In addition, criminal penalties exist for intentional violations of the Act.

In addition to public civil and criminal actions to bring about compliance, Section 505 of the Act, 33 U.S.C. §1365, provides for citizen suits. Section 505 authorizes any citizen to commence a civil action on his own behalf against any person, including the United States and any other government agency to the extent permitted by the 11th Amendment to the United States Constitution, who is alleged to be in violation of effluent standards or limitations under the Act, or in violation of a compliance order issued by the U.S. EPA or by the state with respect to a standard or limitation. A citizen may also commence civil action against U.S. EPA for its alleged failure to perform any nondiscretionary duty under the Act. Under this latter provision, a suit may be brought to compel U.S. EPA to promulgate effluent limitations in accord with a statutorily prescribed schedule. See for example, NRDC v. Train, 6 E.R.C. 1033 (D.D.C. 1973), aff'd 510 F.2d 692, 7 E.R.C. 1209 (D.C. Cir. 1974). The citizen suit authorization has been read broadly so as to allow such suits based on a water quality standard violation as well as an effluent limitation violation.

Under the Act, "citizen" is defined to mean "a person or persons having an interest which is or may be adversely affected." 33 U.S.C. §1365(g). "Person" means "an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body." 33 U.S.C. §1362(5). These definitions have been applied to specific cases in accord with the principles of federal case law on standing to sue. Middlesex County Sewage Authority v. National Sea Clammers Association, 453 U.S. 1 (1981); Montgomery Environmental Coalition v. Costle, 646 F.2d 568, 576,

(D.C. Cir. 1980); Commonwealth Edison Co. v. Train, 71 F.R.D. 391 (D.C. Ill. 1976). Under these principles, any person who is able to establish injury to a substantial interest has standing to bring suit for permit issuance or enforcement under Section 505 of the Act. Section 505 has also been interpreted to grant to an interested party a right to intervene in federal enforcement actions under the Act. People of State of Illinois v. Outboard Marine Corp. Inc., 619 F.2d 623, 632 (7th Cir. 1980), vacated and remanded, 101 S. Ct. 3152 (1981), aff'd in part. No. 79-1341, 1725 Consolidated (7th Circuit, April 19, 1982).

In addition, Section 505(e) of the Act preserves the right which any person may have under any other statute or common law to seek enforcement of any effluent standard or limitation or to seek any other relief, including relief against the U.S. EPA or a state agency. 33 U.S.C. §1365(e).

The federal statutes provide another avenue for interested parties to participate in the regulatory process by requiring that public notice of state permit issuing activities be provided. Under §402(b)(3), 33 U.S.C. §1342(b)(3), a state permit granting agency must ensure that the public and any state whose waters may be affected by the issuance of a permit receive notice of the permit application and the opportunity to participate in a public hearing. Section 402(b)(5), 33 U.S.C. §1342(b)(5), provides that state permit granting agencies must ensure that affected states have an opportunity to submit written recommendations concerning the permit applications to the issuing state and the EPA, and both the affected state and the EPA must receive notice and a statement of reasons if any part of the recommendations of the affected state are not accepted. As

further protection of state's rights in interstate disputes, the EPA may veto, under §402(d)(2)(A), 33 U.S.C. §1342(d)(2)(A), any permit issued by a state when waters of another state may be affected. Under Section 402, U.S. EPA has promulgated regulations requiring states to ensure public participation in the permit issuing process. 40 CFR Part 25. Under those regulations, EPA may withdraw an approved permit program from a state for failure to comply with applicable public participation requirements.

In Milwaukee v. Illinois, supra at 326, the Supreme Court recognized that "the basic grievance of respondents [Illinois] is that the permits issued to petitioners pursuant to the Act do not impose stringent enough controls on petitioners' discharges." However, review of interested parties' enforcement rights under the FWPCA reveals that the issue of stringency of controls may be raised in the permit process by any interested citizen. Any citizen having an affected interest may challenge the sufficiency of standards applied in the discharge permit before it becomes effective. (In the case of the Milwaukee permits, Illinois was given notice of the proceedings and offered an opportunity to participate and present its views. It chose not to do so.) If a state or the U.S. EPA fails to issue a permit for a point source discharge, or fails to adequately enforce a permit, any interested citizen may compel permit issuance or enforcement action. In addition, it should be noted that adoption of standards enforced through the permit, both state water quality standards and federal effluent limitations, occurs only after formal rulemaking proceedings have taken place. Those rulemaking proceedings are subject to state and federal procedural

requirements, including public notice and opportunity to comment. Therefore, an interested person may challenge the stringency of any general standard or limitation, in addition to participating in specific permit issuance and enforcement proceedings. The citizen suit provision and the administrative public participation requirements under the Act assure that every person with an affected interest is afforded a meaningful opportunity to protect that interest.

III. CONCLUSION.

Under the FWPCA, all point sources of all pollutant discharges are regulated by a comprehensive permit program supervised by an expert administrative agency. Every person with an "affected interest" has the right to participate in this regulatory scheme and to enforce the FWPCA's requirements, including the right to compel the U.S. EPA to issue necessary effluent limitations. Finally, interested persons retain all other statutory and state common law rights to enforce pollution controls.

Under the FWPCA's comprehensive statutory scheme, the goal of national uniformity of standards is preserved. The alternative of federal common law actions would disrupt this uniformity.

The FWPCA was enacted after years of trial and error under other federal water pollution control laws. It is the end product of that learning process. Its very purpose is to establish uniform minimum nationwide pollution control standards, while preserving the states' rights to tighten those standards as they see fit. Revival of the federal common law of nuisance would undermine both the goal of national uniformity and the

philosophy that the states shall determine when pollution controls shall exceed those standards set under the federal statute.

Given the all-inclusive scope of the FWPCA, a revival of federal common law would be an unnecessary regression.

COMPARATIVE COST [1] OF THE WPAP UNDER

FEDERAL AND STATE COURT ORDERS

(in billions of dollars)

	Wisconsin DNR Order	Federal Court Order [2]	Percent higher cost of Federal Court Order
Total Cost	(A) $1.63	(D) $2.33	(G) 43%
Local share with: (1) Current funding assumptions [3] (2) No borrowing (3) February 1982 Program Schedule	(B) $ .77	(E) $1.25	(H) 62%
Local share with: (1) Current funding assumptions [3] (2) No borrowing (3) Reimposed Federal schedule to be complete in 1992 [4]	(C) Same as above	(F) $1.33	(I) 73%

1) In mid-1982 dollars. (ENR 3740)
2) Includes requirement of AWT, no overflows or bypasses (protection against the storm of record). Estimates from the adopted Facility Plan except for AWT, estimated in 1978. Estimate updated to ENR 3740.
3) As assumed available by the MMSD 1983 capital budget. Assumes the maximum will be captured under the Federal Court Order, in spite of the fact that AWT is not grant-eligible.
4) Scheduling feasibility has not been addressed.

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PROGRAM COST ESTIMATE
MID-1982 DOLLARS

PROJECT	COST
JONES ISLAND	$432,850,000
SOUTH SHORE	151,540,000
CSO	285,000,000
MIS REHABILITATION	36,900,000
INTERCEPTORS & RELIEF	567,400,000
OFFSITE SOLIDS	44,900,000
HYDRAULICS & CONTROLS	20,340,000
TOTAL MMSD COST	**$1,538,930,000**
LOCAL REHABILITATION	90,910,000
TOTAL WPAP COST	**$1,629,840,000**

Note:
Costs reflect estimated mid-1982 $ Engineering News-Record Construction Cost Index of 3740.

Revised - June 1982

07/22/82

PRESENTATION TO SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

Why Federal Common Law Should Not Be Inserted In The Water Pollution Control Act

My name is Eric Jankel. I am Executive Director of the Narragansett Bay Commission, a Sewerage Commission serving people and industry with some 200,000 connections in Providence, Rhode Island and all or parts of five adjoining municipalities. I am pleased to be permitted to give brief remarks on why the Federal Common Law should not be inserted into the Federal Water Pollution Control Act. Our reasons are that it would be unfair, costly, unnecessary and create confusion in the law and the municipalities which must obtain and operate under N.P.D.E.S. permits as required by the Federal Water Pollution Control Act and the federal regulations issued under it.

Our commission, as Senator Chaffee knows, was created because the City of Providence was not able to comply with a Federal court order obtained after the EPA and the State of Rhode Island brought suit against Providence. The Bay Commission was created by the legislature with the object of meeting temporary permit conditions and designing, financing and constructing a sewerage system which would collect and treat sanitary and industrial wastes so as to comply with the standards of the Federal Water Pollution Control Act and the regulations issued under it.

We are faced with an enormous task in designing, financing and constructing a system which the engineers tell us will comply

with those objectives. We are spending $4,500,000 in design alone and will take 5 years to complete that work. The design work is very complex. Engineers and we need to know what standards control the design. Is it the standards reflected the conditions of the permit and consent order of the court? Or is it all of that plus some new unknown additional standard that a judge may articulate some years hence in some future litigation which can ignore the conditions of the permit & statutes? We understand that that question was the central issue decided by the United States Supreme Court in April 1981 in Milwaukee v. Illinois. That decision held in effect that Congress could not have intended that a judge could impose collection and treatment standards different than those mandated by Congress and contained in Milwaukee's permit. We agree that Congress and the court were both right.

It would be unfair and costly to our commission and Providence and the other cities if a federal court were permitted by Congress to do what a federal judge did to Milwaukee. Milwaukee's permit and a state court order, I am told, provided that the combined sewer overflows (with which Providence is also concerned), must be corrected to the point of reducing overflows to once a year and discharging treated effluent which met the standards of 30 parts per million in both BOD and SS measured by a thirty day average. The lower federal court in Chicago required Milwaukee to completely eliminate CSO, which is the equivalent of designing a sewer system so large that there would be only one overflow each hundred years and required treatment to five parts per million of BOD and SS on a thirty day average with a daily maximum of no more than ten per million. I shudder

to think what the cost would be to Providence and that area if standards of the nature which were applied to Milwaukee were to be imposed on us in the future. Would we have to redesign and rebuild the system? Will we have to throw out sewer pipes that weren't of adequate diameter or try to crowd additional clarifiers unto the land previously set aside for a treatment plant?

In other words, we belive that the Supreme Court correctly said that it was sensible for congress to have intended that an adversary proceeding before the grant or renewal of an NPDES permit gives ample opportunity for all parties to be heard on the conditions or specifications of the permit. And after they have been heard and made their arguments for a strict or less strict interpretation of the federal and state statutes and regulations, then the proper remedy, in my judgment, is to appeal if they don't like the permit. At some time and place the uncertainty about design must end. We believe that the court was right when it held that the Federal Water Pollution Control Act and the EPA regulations issued under it occupied the field or dealt with it in a comprehensive manner. You know that the court spent many pages analyzing why congress' act and the regulations under it were so comprehensive as not to leave room for a federal judge to add something else. I thought I'd look at the sheer volume of the act and regulations. The Federal Water Pollution Control Act as amended is 164 pages. The EPA regulations are 1,578 pages in the Code of Federal Regulations. I understand that the legislative history contains over a thousand pages more. It was

cited by the Supreme Court in its exhaustive review the permit system created by Congress.

Sewers are expensive and the federal government is, as you know, decreasing the percent of cost which it will grant to sewerage collection and treatment. Any delay in carrying out the timetable for the construction of the plant is not only important in delaying the results that are sought to be achieved but in increasing the cost during an inflationary period. Also any delay decreases the amount of federal participation that's available. The last thing which the federal government should do at this time is to open the doors to more litigation delay and uncertainty that would certainly follow adding the Common Law back to the Federal Water Pollution Act.

Even without being a lawyer, it's easy to see how much confusion could be created by the seemingly simply remedy of adding the Common Law to FWPCA. That is so because the Supreme Court ruled that the existing act and regulations were so comprehensive that they touched all points and thereby occupy the field. What purpose would be served than by adding the Common Law? If congress does add it then the courts will ask what was the purpose. Would it be that congress was saying that it lacked confidence in the fairness of the standards set by it and that the court could set higher or lower standards? I doubt that, but the questions might be asked. Or does it mean that congress disagreed with the Supreme Court when it praised the legislation as comprehensive and that congress now felt that there might be some unspecified gaps which the Common Law might fill without inviting the courts to use the Common Law to overrule specific provisions in FWPCA or the EPA

regulations? Who is to tell? Won't this uncertainty occasion even more litigation just to find out what congress meant by adding the Federal Common Law on top of our extensive act and set of regulations?

These days we hear some say that the government should get off the backs of the people. I say that the cities have enough problems trying to carry out the purposes of the Clean Water Act and we would like to keep the judges off our backs so that we can get on and do the job. A permit should be a permit. It should mean something. You don't want judges to override Congress and the regulations. We and the other municipalities don't either.

Because of the complexity of this subject, I have attached a position paper prepared by Milwaukee and endorse their position. What happened to them is a horrible example of our concern. The Supreme Court has now ended the uncertainty in the field.

Please don't let what happened to Milwaukee be repeated in Providence.

ATTACHMENT A

STATUTORY REFERENCE TO THE FEDERAL COMMON LAW
IS UNNECESSARY AND ACTUALLY CAUSES CONFUSION

AN OUTLINE

A. Milwaukee v. Illinois applied the age-old concept that where Congress has spoken specifically on a subject, there is no room for judge-made law which would supplement or vary the standards provided by Congress as interpreted by regulations adopted by a federal agency pursuant to such a statute. In applying that concept, Milwaukee v. Illinois exhaustively analyzed the Federal Water Pollution Control Act of 1972 and found it complete. The Court held that Congress and the EPA dealt with all conceivable subjects which ought to be taken into account in determining the collection and treatment standards to be contained in a permit for the construction and operation of a point source discharge, including treatment plants and overflows.

Regardless of whether the Supreme Court was correct in that analysis to now by statute say that the "federal common law" continues to apply would create confusion. Congress may in any event legislate further on standards or other areas of the law. If the federal common law were to be legislatively interposed, if the federal statute and the regulations adopted thereunder provide that treatment standards must be "x," what does the "common law" do? Is a judge authorized under the preserved "common law" to find that the standards ought to be "2x" or "1/2x"?

Other environmental statutes, such as RCRA, which have not yet had Supreme Court review as to whether it so occupies the field that it "displaces" federal common law, may or may not be found to do

so when examined. The constitutional approach is to let the courts determine if the federal common law continues to have a role to play as it did for many years in the water pollution control field. If the statutory scheme is not complete, the courts will then perform their traditional role of filling the gaps. If the thoroughness of Congress's work prevents the courts from having gaps to fill, they will bow to Congress. Amending a complete statute by saying that the judges are free to apply the common law is like saying they are free to overrule Congress. Such an amendment is not only of doubtful constitutional validity, but it will lead to more litigation rather than to bringing certainty and fairness to the law. The real test for the existence of common law jurisdiction must continue to be, as it always has been, the question of whether there are legislative gaps for the courts to fill: if so, there is federal common law jurisdiction; if not, there is no common law jurisdiction. This is true without mention of the common law in the statute.

B. Persons who obtain permits under the federal Act and standards should be entitled to design and operate a sewerage treatment plant in reliance that the permit means that they have in fact complied with federal standards. Permitting the federal common law to operate and the judges to apply previously unstated, probably not nationally-uniform collection and treatment standards is to create fiscal and practical chaos for persons who hold permits.

What is the purpose of a permit if it is not to settle once and for all what the holder of the permit is required to do by federal law?

C. Finally, it must be kept in mind that neither the Supreme Court's decision in Milwaukee v. Illinois nor the present Federal Water Pollution Control Act prevents a state from imposing upon its own residents any standards it desires, so long as they are at least as stringent as those required by the Act. Congress can, of course, change any standards set forth in the Act. It is only in the area of interstate disputes such as arose in the Milwaukee v. Illinois case (as opposed to intra-state) where the federal common law has any practical effect. It is precisely in this area of interstate disputes where both the Courts and Congress have historically and consistently maintained the constitutional principle that Congress and not the Judiciary is the final arbiter of interstate relationships. Congress cannot and should not cede this authority to the Judiciary.

ATTACHMENT B

POSITION PAPER

THE FEDERAL WATER POLLUTION CONTROL ACT THOROUGHLY PROTECTS THE NATION'S INTEREST IN WATER POLLUTION CONTROL

I. STATEMENT OF POSITION

Since the decision of the United States Supreme Court in the case of Milwaukee v. Illinois, 451 U.S. 304 (1981), some consideration has been given to amendment of the Federal Water Pollution Control Act of 1972 ("FWPCA" or "the Act"), 33 U.S.C. §1251 et seq., as amended, to revive the federal common law of nuisance. Any consideration of such an amendment to the FWPCA presupposes gaps in the existing statutory scheme, since the courts are not called upon to create federal common law unless Congress has not addressed the area of concern. This principle was discussed in Milwaukee v. Illinois, where the court stated the issue as "whether the legislative scheme '[speaks] directly to a question'", or whether there exists some "'interstice' to be filled by federal common law." Milwaukee v. Illinois, 451 U.S. at 315 and 324, n. 18 (1981). In the absence of such an "interstice", "the need for such an unusual exercise of lawmaking by federal courts disappears." Milwaukee v. Illinois, 451 U.S. at 314.

This paper will illustrate that the comprehensive water pollution control scheme adopted by Congress in 1972, and subsequently amended, is complete and that no gaps exist in the scheme. Indeed, "there is no room for courts to attempt to improve on that program with federal common law." Milwaukee v. Illinois, 451 U.S. at 319.

II. THE CORNERSTONE: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

The major purpose of the 1972 FWPCA was "to establish a comprehensive long-range policy for the elimination of water pollution." S. Rep. 92-414, at 95, 2 Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1 at 1511. The discharge permit system is key to that policy. Weinberger v. Romero-Barcelo, 50 USLW 4434 (April 27, 1982).

Under the Act, the "discharge of any pollutant" to navigable waters is unlawful unless permitted under the NPDES. 33 U.S.C. §1311(a). The statutory definitions and regulations promulgated under the Act to implement this permit program are so comprehensive that a) all sources of pollutant discharges to navigable waters are regulated, b) discharges of all pollutants of concern are limited and c) the rights of all parties with any substantial interest affected by a given discharge are protected.

A. All discharges to navigable waters are regulated.

The Act regulates the "discharge of a pollutant" which is broadly defined to mean "any addition of any pollutant to navigable waters from any point source" and "any addition of any pollutant to the waters of the contiguous zone of the ocean from any point source other than a vessel or other floating craft." 33 U.S.C. §1362(12). The effect of this definition turns on the definition of the term "point source", which is "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or

may be discharged. This term does not include return flows from irrigated agriculture." 33 U.S.C. §1362(14). On its face, then, the statute aims to regulate virtually every conceivable source of pollutant discharges, with the exception of one (irrigation return flows).

In fact, the courts have affirmed the scope of this definition by interpreting the term "point source" quite broadly. See, for example, U.S. v. Earth Sciences, Inc., 599 F.2d 368, 374 (10th Cir. 1979) (holding that intermittent discharges of sodium cyanide-sodium hydroxide leachate solution from a reserve sump in the circulating drainage system in a gold mining operation were discharges from a "point source"); Sierra Club v. Abston Construction Co., Inc., 620 F. 2d 41, 45 (5th Cir. 1980) (holding that "a point source of pollution may also be present where miners design spoil piles from discarded overburden such that, during periods of precipitation, erosion of spoil pile walls results in discharges into a navigable body of water by means of ditches, gullies and similar conveyances, even if the miners have done nothing beyond the mere collection of rock and other materials.") Recently, the District Court for the District of Columbia held, in the case of National Wildlife Federation v. Gorsuch, 530 F. Supp. 1291 (D.D.C. 1982), that a dam and reservoir are point sources which discharge pollutants within the meaning of the Act, and are, therefore, subject to regulation under the NPDES.[1/]

[1/] This case is particularly interesting since EPA's position was that the dam was not a point source. The court disagreed with the Agency's interpretation of the statute, quoting from Natural Resources

Under the Act, two major classes of point sources are created: publicly owned treatment works (POTW's) and all other point sources, which, for convenience, are generally called "industrial" point sources. All pollutant dischargers fall into one of these classes, and none are left unregulated. For the larger, "industrial" class of point sources, the U.S. EPA has promulgated technology-based effluent limitations for forty-two classes of industrial discharges which discharge directly to surface waters. 40 CFR Parts 405 through 460. These regulations prescribe specific effluent limitations for classes of dischargers ranging from the iron and steel industry to leather tanning. These regulations prescribe limitations on all types of discharges, including process discharges, non-contact and contact cooling water discharges, and stormwater runoff collected in materials storage areas (i.e., coal pile runoff) for discharge. Those "industrial" sources which discharge to POTW's, rather than directly to navigable waters, are required to meet pretreatment standards established by U.S. EPA under Section 307(b)(1) of the Act. 33 U.S.C. 1317(b)(1).

(Footnote 1/ continued)

Defense Council v. U.S. Environmental Protection Agency, 656 F2d 768, 774 (D.C. Cir. 1981): "Our duty is to see that the congressional mandate is carried out, and misinterpretation of that mandate will be corrected ... where the Administrator's interpretation of the Act coincides with the purpose and intent of the statute we defer to his construction ... however, no amount of deference can justify an interpretation that is contrary to law." National Wildlife Federation, supra at 1311. Thus, under the federal statutory scheme, the courts maintain an active role in water pollution control matters.

Publicly owned treatment works are defined in Section 212(2)(A) and (B) of the Act, 33 U.S.C. 1292(2)(A) and (B), to mean "any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature ... or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances;" and "any other method or system for preventing, abating, reducing, storing, treating, separating or disposing of municipal waste, including stormwater runoff, or industrial waste, including waste in combined stormwater and sanitary sewer systems."

Discharge permits currently applicable to the Milwaukee metropolitan area sewerage system are a good example of the all-inclusive nature of this definition. All municipal wastes generated in the Milwaukee metropolitan area are treated at either of two treatment plants, both of which discharge to Lake Michigan. Each plant has a single outfall, or discharge point, at which effluent limitations are applied. Copies of the two discharge permits are attached. The Jones Island (JI) Wastewater Treatment Plant Permit (Exhibit 1) contains the effluent limits for its outfall at Part I, p.3. The South Shore (SS) permit (Exhibit 2) also contains the outfall limits

at Part I, p. 3.[2] In addition to the main plant outfall, each permit identifies all known overflow points in the sewage collection system tributary to each plant (JI, Part II, p. 1; SS, Part II, p. 1). These are not points of continuous discharge, but are points where discharges may occur (even if only rarely) in wet weather conditions.

These overflow points are either to be eliminated by a fixed date or to meet specified effluent limitations. (JI, Part II, p.2; SS, Part II, p. 1). In addition, the South Shore Plant has an outfall which is used as an emergency bypass only in the event that the design flow of the plant is exceeded (in wet weather) and the plant is in danger of equipment damage. This outfall is also regulated under the permit. (SS, Part II, p.2).

In addition to these two plant discharge permits, the Wisconsin Department of Natural Resources has issued permits regulating overflow points to each municipality in the Milwaukee metropolitan area.[3] Such a permit has been issued to the City

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[2] Both the Jones Island and South Shore discharge permit have been amended since the date of original issue to reflect regulatory changes. The exhibits here do not reflect these amendments since they are not material to this discussion.

[3] Under state law, the treatment plants, along with the main intercepting sewer system are owned and operated by the Milwaukee Metropolitan Sewerage District. The local sewage collection systems are owned and operated by each respective municipality.

of Milwaukee. That permit effectively regulates all two hundred forty-four known overflows and crossovers within the City's sewer system. A copy of that permit is attached here as Exhibit 3. Again, these overflow points have only intermittent discharges. Part I of the permit identifies the location and size of each overflow point and crossover. Part II, Sections A and B of the permit establishes interim discharge reporting, effluent limitations, and monitoring requirements. Part II, Section C sets the final (effective July 1, 1983) requirements for discharge reporting, effluent limitations and monitoring. Thus, every known discharge point, regardless of frequency of use, is regulated.

The specific limitations set in this permit have been challenged by the City of Milwaukee. Likewise, the Milwaukee Metropolitan Sewerage District disputes the limitations set for its overflow points. Both permittees challenge the Wisconsin Department of Natural Resources' position that overflow points are POTW's subject to secondary treatment standards. At least one federal circuit court concurs with the permittees' position. Montgomery Environmental Coalition v. Costle, 646 F.2d 568, 592 (D.C. Cir. 1980). The dispute is not whether these overflow points are to be regulated under the permit system, but to what extent. The issue of what specific effluent limitations to apply to a point source category is properly and completely resolved during state and federal rulemaking and permit proceedings under the FWPCA.

Under the Act, each and every point source discharge, whether continuous or intermittent, must be specifically authorized by a permit. In accord with the Act, the Wisconsin Department of Natural Resources, in the Milwaukee case, has issued permits

which regulate every single known discharge point within the municipal sewerage system. The Milwaukee case is but one example of the comprehensive scope of regulation established under the FWPCA.

B. All Pollutants of concern are subject to effluent limitations.

Given that all point source discharges are susceptible to regulation under the Act, the question becomes whether all pollutants originating from those sources are effectively limited under the NPDES. An examination of the provisions of the Act, the regulations issued under it, along with a review of the Milwaukee example, clearly shows that all pollutants of concern are effectively limited.

Under the Act, the definition of "pollutant" includes "... dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked, or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water ...." 33 U.S.C. §1362(6). It is difficult, if not impossible, to conceive of a substance which would not be included within this definition. The courts have consistently construed this definition broadly. See, for example, U.S. v. Velsicol Chemical Corp., 438 F. Supp. 945 (1976) (holding pesticides endrin and heptachlor are "pollutants"); U.S. v Weisman 489 F. Supp. 1331 (1980)(holding fill material dumped and spread on property for road construction was a "pollutant"). Recently, the Supreme Court ruled in a case in which the district court found that the release during military training of ordnance from aircraft or from ships into navigable waters is a discharge of

"pollutants" within the meaning of the FWPCA. Weinberger v. Romero-Barcelo, supra (1982).

Two basic categories of pollutants are specifically identified under the Act. "Conventional pollutants" include biological oxygen demand (BOD), suspended solids (SS), fecal coliform, and pH. 33 U.S.C. §1314(a)(4). "Toxic pollutants" are defined in Section 301(a)(2)(C) of the Act as those identified in Table 1 of Committee Print No. 95-30 of the Committee on Public Works and Transportation of the House of Representatives (these are often called the "priority" pollutants), along with all toxic pollutants added to that list under Section 307(a) of the Act, 33 U.S.C. 1317(a). This list of toxic pollutants contained in Committee Print No. 95-30 was compiled by U.S. EPA as the result of a lawsuit brought by the Natural Resources Defense Council, NRDC v. Train, 8 ERC 2120 (D.D.C. 1976), to compel that Agency to establish effluent limits for toxics, and, as a result, is considered to be a comprehensive listing of known toxic pollutants. If a toxic pollutant is not listed currently, the Agency may, under the Act, add to the list.

Finally, a catch-all provision of the Act requires that all pollutants not included within either of the two specified categories be limited. 33 U.S.C. §1311(b)(2)(F). All pollutants not listed as conventional or toxic fall into this miscellaneous group. Examples are phosphorus, heat and chlorine.

For each category of point sources previously discussed, the U.S. EPA is authorized under Section 301 of the Act, 33 U.S.C. §1311, to set effluent limitations. Effluent limitations are set for those pollutants generated by each particular category of point

source and are applied to individual sources through the NPDES permit for that source. To date, U.S. EPA has established effluent limitations for publicly owned treatment works, 40 CFR Part 133; for forty-two industrial point sources, 40 CFR Part 405 through Part 460; and for toxic pollutants (regardless of source), 40 CFR Part 129. In addition, according to U.S. EPA's Semi-Annual Regulatory Agenda (47 FR 15702, April 12, 1982), additional effluent limitations are currently proposed for at least twenty-eight categories of point sources.

Finally, if federal effluent limitations do not exist, or if a state wishes to impose limitations more stringent than the federal standards, the Act provides the state with sufficient authority to impose the necessary restrictions. For example, in the Milwaukee Metropolitan Sewerage District permits discussed previously, the Wisconsin DNR has imposed phosphorus and fecal coliform (weekly) effluent limitations which are based upon state water quality standards. (JI, Part I, p.3; SS, Part I, p.3). These limitations were imposed since no federal effluent limitations exist. The limitations are "tailored" to take the characteristics of the receiving water, i.e., Lake Michigan, into account.

Under Section 301(b)(1)(C) of the Act, 33 U.S.C. §1311(b)(1)(C), all point sources are required to meet "any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any state law or regulations, (under authority preserved by Section 510) or any other federal law or regulation, or required to implement any applicable water quality standard established pursuant to this Act." This requirement is enforced regardless of whether the state or U.S. EPA is the permit issuer,

since under the FWPCA the U.S. EPA may not issue an NPDES permit without state certification that the permit conforms to state water quality standards. A state has the authority to deny certification of the permit or attach conditions to the final permit. 33 U.S.C. §1341. The net effect of this requirement is that all pollutants, whether or not they are regulated by federal effluent limitations, are subject to a state's certification that all of its water quality standards, or other pollution control requirements, will be met by the permitted discharge.

In the event that no federal effluent limitations or state water quality standards exist for a particular pollutant or class of point sources, the U.S. EPA is authorized under Section 402(a)(1), 33 U.S.C. 1342(a)(1), to issue a permit which will meet "such conditions as the Administrator determines are necessary to carry out the provisions of this Act." In accord with this authorization, the federal permit regulations provide that "each NPDES permit shall include conditions meeting ... technology-based effluent limitations and standards based on effluent limitations and standards promulgated under Section 301 of FWPCA ... on case-by-case effluent limitations determined under Section 402(a)(1) of FWPCA, or on a combination of the two ...." 40 CFR §122.62(a). Thus, if a void exists in the effluent limitation regulations, in respect to a particular pollutant source, the U.S. EPA is authorized to establish standards for that source through the permit process.

Another examination of the Milwaukee Metropolitan Sewerage District permits shows how the various federal effluent limitations and state water quality standards are applied to a real discharge

to achieve the total regulation contemplated by the Act. The effluent limitations for the Jones Island Plant are found at Part I, Page 3 (Exhibit 1). The source of each effluent limitation is as follows:

POLLUTANT	BASIS OF EFFLUENT LIMITATION
BOD_5 (monthly)	40 CFR Part 133.102
BOD_5 (weekly)	40 CFR Part 133.102
Suspended Solids (monthly)	40 CFR Part 133.102
Suspended Solids (weekly)	40 CFR Part 133.102
pH	40 CFR Part 133.102
Residual Chlorine (daily)	Wisconsin Administrative Code Ch. NR 210
Fecal Coliform (monthly)	Wisconsin Administrative Code Ch. NR 210
Fecal Coliform (weekly)	Wisconsin Administrative Code Ch. NR 102 (Water quality standard based effluent limitation)
Total phosphorus (monthly)	Wisconsin Administrative Code Ch. NR 102 (Water quality standard based effluent limitation)

The permit applies the more stringent of either federal or state standards to the Jones Island Plant discharge. In addition, the permit imposes the same combination of federal and state standards upon overflow points (Exhibit 1, Part II, p.1). In accord with state and federal law, this permit is tailored to the specific requirements of the particular circumstances involved, and thus limits the discharge of every pollutant determined by state and federal agencies to be discharged in significant quantity. (Under FWPCA, permits only address pollutants present in the discharge under consideration; thus permits issued to different dischargers will contain limitations appropriate to

the needs of each case. In some instances there will be many pollutants present and hence numerous specific limitations; in other instances - like the Milwaukee case - there are only 5 or 6 pollutants present in any significant quantity. Anyone concerned about the control of specific pollutants may of course participate in the permit proceeding.)

In addition to regulation of the treatment plants' discharges of pollutants to surface waters, the permits regulate disposal of sludges generated in the wastewater treatment process. Methods of sludge disposal must be reported, along with results of physical and chemical analyses of sludge. (JI, Part II, Section B, p.1; SS, Part II, Section B, p.1). The permit also contains pretreatment requirements for industrial sources which discharge wastes to the sewerage system.

C. The rights of all interested parties are protected.

Since it may be concluded that the Act regulates all sources and all pollutants, the only remaining area in the statutory scheme to be examined for inadequacy is the area of protection of rights of interested parties. As will be shown, the Act thoroughly protects the rights of all interested parties.

Under Section 309 of the Act, 33 U.S.C. §1319, primary enforcement authority rests with state pollution control agencies where they have been delegated the permit issuing function. U.S. EPA retains enforcement authority in states where it continues to issue NPDES permits. The agencies are authorized to bring civil actions to enforce the requirements of discharge permits; U.S. EPA is authorized to issue compliance orders. In addition, criminal penalties exist for intentional violations of the Act.

In addition to public civil and criminal actions to bring about compliance, Section 505 of the Act, 33 U.S.C. §1365, provides for citizen suits. Section 505 authorizes any citizen to commence a civil action on his own behalf against any person, including the United States and any other government agency to the extent permitted by the 11th Amendment to the United States Constitution, who is alleged to be in violation of effluent standards or limitations under the Act, or in violation of a compliance order issued by the U.S. EPA or by the state with respect to a standard or limitation. A citizen may also commence civil action against U.S. EPA for its alleged failure to perform any nondiscretionary duty under the Act. Under this latter provision, a suit may be brought to compel U.S. EPA to promulgate effluent limitations in accord with a statutorily prescribed schedule. See for example, NRDC v. Train, 6 E.R.C. 1033 (D.D.C. 1973), aff'd 510 F.2d 692, 7 E.R.C. 1209 (D.C. Cir. 1974). The citizen suit authorization has been read broadly so as to allow such suits based on a water quality standard violation as well as an effluent limitation violation.

Under the Act, "citizen" is defined to mean "a person or persons having an interest which is or may be adversely affected." 33 U.S.C. §1365(g). "Person" means "an individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, or any interstate body." 33 U.S.C. §1362(5). These definitions have been applied to specific cases in accord with the principles of federal case law on standing to sue. Middlesex County Sewage Authority v. National Sea Clammers Association, 453 U.S. 1 (1981); Montgomery Environmental Coalition v. Costle, 646 F.2d 568, 576,

(D.C. Cir. 1980); Commonwealth Edison Co. v. Train, 71 F.R.D. 391 (D.C. Ill. 1976). Under these principles, any person who is able to establish injury to a substantial interest has standing to bring suit for permit issuance or enforcement under Section 505 of the Act. Section 505 has also been interpreted to grant to an interested party a right to intervene in federal enforcement actions under the Act. People of State of Illinois v. Outboard Marine Corp. Inc., 619 F.2d 623, 632 (7th Cir. 1980), vacated and remanded, 101 S. Ct. 3152 (1981), aff'd in part. No. 79-1341, 1725 Consolidated (7th Circuit, April 19, 1982).

In addition, Section 505(e) of the Act preserves the right which any person may have under any other statute or common law to seek enforcement of any effluent standard or limitation or to seek any other relief, including relief against the U.S. EPA or a state agency. 33 U.S.C. §1365(e).

The federal statutes provide another avenue for interested parties to participate in the regulatory process by requiring that public notice of state permit issuing activities be provided. Under §402(b)(3), 33 U.S.C. §1342(b)(3), a state permit granting agency must ensure that the public and any state whose waters may be affected by the issuance of a permit receive notice of the permit application and the opportunity to participate in a public hearing. Section 402(b)(5), 33 U.S.C. §1342(b)(5), provides that state permit granting agencies must ensure that affected states have an opportunity to submit written recommendations concerning the permit applications to the issuing state and the EPA, and both the affected state and the EPA must receive notice and a statement of reasons if any part of the recommendations of the affected state are not accepted. As

further protection of state's rights in interstate disputes, the EPA may veto, under §402(d)(2)(A), 33 U.S.C. §1342(d)(2)(A), any permit issued by a state when waters of another state may be affected. Under Section 402, U.S. EPA has promulgated regulations requiring states to ensure public participation in the permit issuing process. 40 CFR Part 25. Under those regulations, EPA may withdraw an approved permit program from a state for failure to comply with applicable public participation requirements.

In Milwaukee v. Illinois, supra at 326, the Supreme Court recognized that "the basic grievance of respondents [Illinois] is that the permits issued to petitioners pursuant to the Act do not impose stringent enough controls on petitioners' discharges." However, review of interested parties' enforcement rights under the FWPCA reveals that the issue of stringency of controls may be raised in the permit process by any interested citizen. Any citizen having an affected interest may challenge the sufficiency of standards applied in the discharge permit before it becomes effective. (In the case of the Milwaukee permits, Illinois was given notice of the proceedings and offered an opportunity to participate and present its views. It chose not to do so.) If a state or the U.S. EPA fails to issue a permit for a point source discharge, or fails to adequately enforce a permit, any interested citizen may compel permit issuance or enforcement action. In addition, it should be noted that adoption of standards enforced through the permit, both state water quality standards and federal effluent limitations, occurs only after formal rulemaking proceedings have taken place. Those rulemaking proceedings are subject to state and federal procedural

requirements, including public notice and opportunity to comment. Therefore, an interested person may challenge the stringency of any general standard or limitation, in addition to participating in specific permit issuance and enforcement proceedings. The citizen suit provision and the administrative public participation requirements under the Act assure that every person with an affected interest is afforded a meaningful opportunity to protect that interest.

III. CONCLUSION.

Under the FWPCA, all point sources of all pollutant discharges are regulated by a comprehensive permit program supervised by an expert administrative agency. Every person with an "affected interest" has the right to participate in this regulatory scheme and to enforce the FWPCA's requirements, including the right to compel the U.S. EPA to issue necessary effluent limitations. Finally, interested persons retain all other statutory and state common law rights to enforce pollution controls.

Under the FWPCA's comprehensive statutory scheme, the goal of national uniformity of standards is preserved. The alternative of federal common law actions would disrupt this uniformity.

The FWPCA was enacted after years of trial and error under other federal water pollution control laws. It is the end product of that learning process. Its very purpose is to establish uniform minimum nationwide pollution control standards, while preserving the states' rights to tighten those standards as they see fit. Revival of the federal common law of nuisance would undermine both the goal of national uniformity and the

philosophy that the states shall determine when pollution controls shall exceed those standards set under the federal statute.

Given the all-inclusive scope of the FWPCA, a revival of federal common law would be an unnecessary regression.

STATEMENT OF BRUCE J. TERRIS
BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL PROTECTION
OF THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
ON REAUTHORIZATION OF THE CLEAN WATER ACT

July 28, 1982

My name is Bruce J. Terris. I am a partner in Terris & Sunderland which has been litigating environmental matters for national environmental organizations, governmental and Indian bodies, and local groups of farmers, ranchers and other ordinary citizens for 12 years.

The issue which I have been invited to discuss is whether the Clean Water Act should be amended to allow for federal common law nuisance actions to be brought against polluters. I strongly support an amendment to the Act to reverse the second City of Milwaukee v. Illinois decision so that such suits can be brought.

It is important to stress at the outset that such an amendment would only restore the law as it stood before the Supreme Court's decision a year ago. Prior to that time, the Supreme Court's first City of Milwaukee decision held that federal common law was enforceable against polluters and the lower federal courts were faithfully carrying out this mandate. The Supreme Court then abruptly changed the law. I submit that this second decision is inconsistent with Congress' intention and should be reversed.

It is also important to stress the limited, though important, nature of an amendment to restore federal common law remedies. Before the second City of Milwaukee decision only a handful of federal common law cases had been brought relating to water pollution. Most litigation to reduce water pollution was brought by federal or state entities under the water act or, less often, by citizens groups under that same statute. If Congress restores federal common law remedies, it is virtually certain that most cases will continue to be brought under the statute.

Nonetheless, common law remedies are important for several reasons.

First, they are needed when the statute is not sufficient to prevent serious pollution. The statute is now largely technologically based. It is possible to cause severe harm to downstream water users even though the polluter is complying with the technological standard.

Second, the statute is not always enforced. For example, the mechanism for preventing toxic discharges is still not in place despite strong efforts by environmental groups to compel EPA action. At a time when EPA enforcement of environmental laws is, to put it mildly, not exactly vigorous, there is a particular need to allow other remedies.

Third, the statute necessarily has gaps. It is long and complicated enough without Congress seeking to anticipate every conceivable possibility. It makes more sense for Congress to allow the courts to provide a remedy in the unusual case.

In all these three circumstances, unless the second City of Milwaukee case is reversed, the Clean Water Act actually results in reducing effective control of water pollution rather than adding to it. In these situations, if there were no statute, litigation could have been brought under the first City of Milwaukee decision. Based on the existence of the statute, even though it can not be enforced, or EPA is choosing not to enforce it, all remedies for the pollution are eliminated. Congress surely did not intend in adopting what it believed was a strong water pollution control act to weaken pollution control by eliminating existing and potentially effective remedies.

I submit that the Congress should welcome the assistance of the federal courts in seeking to control water pollution in this country. The use of federal common law provides effective remedies without new complicated legislation or a bureaucracy for enforcement. It allows the courts gradually to fashion

specific remedies for specific problems in the manner in which the common law has traditionally developed. It allows Congress to watch the development of the law and then decide a few years hence whether or not it wishes to provide the courts with more guidance.

On the other hand, there is little for industry to fear from allowing the federal courts to entertain nuisance actions. The courts have entertained nuisance litigation for many years without disrupting the legitimate expectations of industry. Moreover, federal nuisance law is surely superior from the standpoint of industry to state law, which is presently enforceable under the second City of Milwaukee case, since federal law will result in uniform national rules and not result in a polluter being hauled into a foreign and hostile state court.

In short, this amendment is an extremely modest one. It simply returns the state of the law to the point it was only a little over a year ago. It simply provides for water pollution control where the statute is not effective. There is no good reason for the amendment to be rejected.

STATEMENT PREPARED FOR THE SENATE COMMITTEE ON ENVIRONMENTAL AND PUBLIC WORKS, SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION ON THE UNITED STATES SUPREME COURT DECISION IN CITY OF MILWAUKEE V. ILLINOIS

By A. Dan Tarlock, Professor of Law
Illinois Institute of Technology
Chicago-Kent College of Law
July 28, 1982

This Committee is considering whether or not to reverse the 1981 Supreme Court decision in City of Milwaukee v. Illinois, 451 U.S. 304. City of Milwaukee holds that the enactment of the Federal Water Pollution Control Act Amendments of 1972 displaced the power of federal courts to apply a federal common law of nuisance to water pollution and other environmental controversies whenever comprehensive regulatory programs have been put in place by Congress. Although the Supreme Court recognized a federal common law of nuisance as early as 1906, the Court did not adapt federal common law to modern pollution problems until its 1972 decision in Illinois v. Milwaukee, 406 U.S. 91 (1972), decided six months before the Amendments were passed.

City of Milwaukee v. Illinois is bad law, bad policy, and an appropriate Supreme Court opinion to be reversed by Congress. My opinion is based on five reasons:

(1) The general principle of a federal common law of nuisance is a sound one, although its application to the facts of Illinois' suit against the City of Milwaukee and the Metropolitan Sewerage Commission and some of the lower federal court cases that used the doctrine is questionable. This Committee should separate the fact of the City of Milwaukee from the general policy issues involved in the doctrine.

(2) The majority opinion is based primarily on the Court's reading of Congressional intent in enacting the 1972 Amendments rather than on constitutional principles that are the special responsibility of the courts to enforce. Thus, Congress upsets no balance of power between the legislative and judicial branches in reversing the opinion. In fact, a legislative reversal would restore the traditional balance upset by the opinion.

(3) The majority opinion is technically weak on two grounds. First, it misunderstands the source and nature of federal common law and the interests that the doctrine is designed to further, and second it gives insufficient weight to Section 505 of the Clean Water Act's savings clause.

(4) The majority opinion is bad pollution control policy. The real basis of the opinion is the unstated assumption that the maximum enforcement liability to which public and private dischargers should be subjected to is totally reflected in federal Environmental Protection Agency and state pollution control agency standards. This is wrong because minimization of discharger risk of liability is a very important policy behind pollution statutes, but it is only one of two relevant interests at stake. Undue emphasis on discharger liablity limitation gives insufficient weight to the public's interest in being protected from serious and unanticipated health risks.

(5) The majority opinion needlessly throws out the baby with the water. The two interests mentioned above -- discharger liability limitation and public health protection -- can adequately be accommodated not by denying federal courts the power to apply federal common law in appropriate circumstances, but by the careful application of the traditional limitations on judicial power that have always surrounded federal common law nuisance actions.

I. SEPARATING GENERAL PRINCIPLES FROM THE FACTS OF THE CASES AND OTHER LOWER FEDERAL COURT CASES

The most appropriate situation to apply to a federal common law of nuisance is where (1) a pollution activity arises in a state that for various reasons does not wish to control it, that (2) effects people and resources in another state, and that (3) does wish to and is attempting to control it. Illinois' suit against Milwaukee was only partially such a suit because Illinois itself had not yet eliminated sewage discharges into Lake Michigan resulting from combined storm and sanitary sewers. And, as the Court of Appeals for the Seventh Circuit found in modifying the distirct court order, People of the State of Illinois v. City of Milwaukee, 599 F.2d 1511, 1574-77 (7th Cir.

1979), the effluent limitations sought by Illinois were not necessary to protect its citizens from the alleged harm. In short, Illinois was not in the strongest factual position because it lacked clean hands and failed to show that it was injured to the extent to which it claimed.

In addition, some lower federal courts have extended the doctrine beyond inter-state controversies. The federal government was allowed to bring federal common law nuisance suits, United States v. Ira S. Bushey and Sons, 346 F. Supp. 145 (D. Vt. 1972); municipalities were allowed to bring suit under this theory, City of Evansville v. Kentucky Liquid Recycling, Inc. 604 F.2d 1008 (7th Cir. 1979); and the decision was applied by one court to intra as well as interstate waters, Illinois v. Outboard Marine Corp., 619 F.2d 632 (7th Cir. 1980). Private parties tried to use the doctrine with little success, however. Jones Falls Sewage System v. Train, 539 F.2d 1006 (4th Cir. 1976). But cf. Stream Pollution Control Board v. United States Steel Corp., 512 F.2d 1036 (7th Cir. 1975). Congress need not accept all of these decisions in restoring the power of the courts to apply a federal common law of nuisance in the face of comprehensive statutory schemes.

II. THE SUPREME COURT'S OPINION IS BASED ON A MISREADING OF CONGRESSIONAL INTENT

The majority Opinion has an extensive discussion, if one can call it that, of separation of powers principles which it claims form the basis for the Opinion. However, the real basis for the Opinion is the Court's conclusion that "at least so far as concerns the claims of respondents, Congress has not left the formulation of appropriate federal standards to the courts through the application of often vague concepts and maxims of equity jurisprudence, but rather has occupied the field through the establishment of a comprehensive regulatory program supervised by an expert administrative agency." This is a technical preemption argument, usually applied to decide if state law has been displaced, and was unnaturally adapted to the issue of displacement of federal common law.

The majority's analysis flawed for two basic reasons. First, the conclusion that the federal common law of nuisance has been displaced is not based on any specific language in the 1972 Amendments. Scattered and often irrelevant legislative history is all that the Opinion can muster to support this conclusion. Rather, the conclusion is based on the court's highly abstract conception of the appropriate balance among courts, Congress and administrative agencies. Second, this concept is too simplistic. With all due deference to Congress, which has labored long and effectively on water pollution problems, and the Environmental Protection Agency, it is not fair to read the Clean Water Act as the final word on pollution control. At all times Congress has recognized that effective solutions to pollution

control must evolve over time in light on experience with existing strategies and new information. Neither Congress nor the Environmental Protection Agency has attempted to foresee all problems, and thus, as the three dissenting justices correctly argued, the majority's theory of automatic displacement is not a true reading of Congressional intent.

The federal common law of nuisance existed long before the 1972 Amendments. Thus, it would seem logical to require a clear statement of Congressional intent to deny the federal courts this power. When Congress did wish to reverse a judicial decision, as they did with certain aspects of the Calvert Cliffs' decision, Calvert Cliffs' Coordinating Committee v. AEC, 449 F.2d 1109 (D.C. Cir. 1971), dealing with the power of the Atomic Energy Commission to set higher water pollution control standards than those established by the Environmental Protection Agency, Congress' intent was made clear. Section 511(c)(2). See A Legislative History of Water Pollution Control Act Amendments of 1972, S. 93-1 198 (1973).

The relevant inquiry, which the majority did not make, was whether a federal common law of nuisance, given its long standing, would frustrate real and substantial federal objectives? As I will argue shortly, there is no frustration of real objectives so it seems correct to conclude that Congress intended to preserve, with all its tensions, the traditional federal common law of nuisance. It is therefore appropriate for Congress to restore this tradition balance.

III. THE OPINION IS TECHNICALLY WEAK

The source of the federal common law of nuisance is the structure of the federal system itself. As Justice Holmes explained in Georgia v. Tennessee Copper Co., 206 U.S. 230 (1907): "The States by entering the Union did not sink to the position of private owners subject to one system of private law." A federal common law of nuisance is necessary to protect a state, suing parens patriae from harm caused by activities subject to another state's regulatory jurisdiction. The issue is not, as the majority opinion put it, whether "courts are better suited to develop national policy in areas governed by federal common law . . .". The issue is whether federal judicial power should be available when activities subject to federal and state regulation still cause substantial harm to the interests of another state. The majority opinion proceeds from the premise that judicial self-restraint is appropriate in cases such as City of Milwaukee because the interests at stake are the same as those involved in deciding whether the federal government has preempted state law. Although there is an argument that a federal common law of nuisance is inappropriate in suits between a state and non-residents because state law will be displaced, Note Federal Common Law and Interstate Pollution, 85 Harv. L. Rev. 1439 (1972), the argument is inapplicable to suits such as City of

Milwaukee which reflect a substantial inter-state conflict. Given the long tradition of a federal common law, the question is whether any substantial federal interest would be frustrated? The majority opinion answers this question in an unsatisfactory manner. It first makes the irrelevant point that the issue is not suited to judicial resolution because federal common law standards are too vague, although the Court this term did not find principles of equity too vague to find them preserved by the Clean Water Act. Weinberger v. Romero-Barcelo, ____ US _____ (1982) holds that courts retain the power to balance the equities to decide if injunctive relief is appropriate. Second, the majority opinion points to no federal interest other than an abstract notion of "comprehensiveness" that would be frustrated.

Finally, Section 505(e) is an adequate, although not totally satisfactory, basis to find that the 1972 Amendments preserved the decision in Illinois v. Milwaukee. The technical inadequacies of the majority's reading of Section 505(e) are well developed in the dissenting opinion in City of Milwaukee and need not be repeated here.

IV. THE MAJORITY OPINION IS BAD POLICY

The real basis for the majority opinion is the unstated assumption that the 1972 Amendments reflect a Congressional decision that federal and state water pollution standards represent the maximum liability to which a discharger should be subject. Certainly, dischargers have a strong interest in knowing the extent of their potential liability because of the substantial costs of compliance with federal and state standards. However, to conclude that the act immunizes dischargers with any further liability seems unwarranted for three (3) reasons. First, all those who undertake activities that are potentially harmful are subject to common law standards of liability. These standards are always evolving to take into account new risks. Thus, the common law rule is generally that compliance with statutory standards or administrative regulations is not an absolute defense against liability. W. Rodgers, Environmental Law, Section 2.10. Second, the primary purpose of the 1972 Amendments and the Clean Water Act is not to limit the liability dischargers; the purpose is to eliminate water pollution. To this end, the Clean Water Act puts dischargers on notice that they are subject to evolving standards of liability. This is reflected in the progressively higher levels of technology-forcing standards to which dischargers are subject and the possibility in Section 303 that dischargers may have to meet additional effluent limitation standards to comply with applicable water quality standards. Third, Congress in other legislation such as Section 7003 of the Conservation and Recovery Act has made it clear that compliance with applicable standards is no defense to liability when activities create a risk of an imminent and substantial hazard.

One lesson that has been learned about environmental problems is that we know very little about what causes harm to the environment and those who use it. Thus, there is always the possibility that a harm exists that is not anticipated by a regulatory scheme. The law of torts has always been available to provide the possibility of redress in such situations. Federal common law nuisance suits are tort actions, and thus there is no reason to deny federal judicial power to adjudicate such suits until Congress makes a clear and deliberate decision that dischargers are subject to too much potential liability. This Congress has not yet done.

V. THE COMMON LAW OF NUISANCE ADEQUATELY MINIMIZES DISCHARGER LIABILITY

The strong interest in discharger liability is adequately minimized by the existing standards of the federal common law of nuisance. I am not one who views the federal common law of nuisance as a major pollution control strategy, e.g., Comment, Requiem for the Federal Common Law of Nuisance, 11 Environmental Law Reporter 752 (1981). The doctrine has a limited but important role to play in elminating major inter-state pollution public health risks not anticipated by federal and state regulatory schemes. The doctrine affords dischargers great protection for at least three (3) reasons: (1) proof of cause in fact is required in pollution suits, Missouri v. Illinois, 200 U.S. 496 (1905); (2) courts retain the power to balance the equities and thus fashion appropriate remedies that include consideration of the costs of compliance with any order. In fact, a discharger may be better off under a federal common law action because benefit-cost considerations are very limited in Clean Water Act proceedings, e.g. Association of Pacific Fisherier v EPA, ____ F.2d ____, 17 ERC 1425 (9th Cir. 1982); and (3) compliance with applicable regulations should be a defense but not a complete immunity from liability. The position was, in effect, adopted by the Seventh Circuit in City of Milwaukee, and it is the right one. Compliance with applicable regulations is presumptively a defense to a federal common law action unless the plaintiff state can show that substantial harm to its interests is nonetheless occuring and this harm was not anticipated in the enactment of the regulatory scheme. This presumption signals that federal common law nuisance suits are extraordinary judicial remedies for pollution, but that they remain in reserve for appropriate occasions.

THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE SENATE ENVIRONMENTAL
AND PUBLIC WORKS COMMITTEE

TESTIMONY ON S2652
CLEAN WATER ACT REAUTHORIZATION

THE SUBCOMMITTEE ON WATER RESOURCES
OF THE HOUSE PUBLIC WORKS COMMITTEE

TESTIMONY ON HR6670
CLEAN WATER ACT REAUTHORIZATION

By Clint Whitney, Executive Director
California State Water Resources Control Board

Mr. Chairman, Members of the Committee, I am Clint Whitney, Executive Director of the California State Water Resources Control Board. I appreciate the opportunity to present California's views concerning a most critical public policy issue - the protection and enhancement of our nation's waters.

EPA's proposed amendments to the Clean Water Act as reflected in (S 2652) (HR 6670) are, in large part, modest. California takes exception to only a few proposed provisions.

First, California objects to any cuts in Section 106 funds. The $40.9 million authorized by this bill is inadequate to support the federal-state partnership so carefully built since 1972. While EPA espouses increased state responsibility, it is apparently unwilling to continue funding at the modest levels of the past.

California already funds 80 percent of its regulatory activities with state funds. The federal 106 funding permits us to assume full delegation of the federal NPDES permit program, which complements the state permit program. EPA is telling you that you can have your cake and eat it too. You have been told that states can cover the decrease in 106 money with 205(g) funds,

achieving the same results for less money. That sleight of hand works only for those states that have not been putting the 205(g) money to work.

California uses the 205(g) funds as they were intended, to get grant funds out to municipalities as rapidly as possible and to make sure that the money is being well spent. We have been successful. California plants have one-fourth fewer problems than the national average. The money goes out the same year it is received. We think 205(g) money is already well spent protecting the investment in the Clean Water Grant Program.

The result of a 20 percent cut in 106 funds is fewer permits issued, fewer compliance inspections, less monitoring, less surveillance - in short, less fundamental regulatory activity. California believes that fundamental regulatory activity is one of the most cost-effective expenditures of public funds. We face budgetary constraints on the state level similar to those you face. However, regulating present and potential polluters is among California's highest priorities. It appears it is among the Reagan Administration's lowest.

That is a shortsighted and costly policy that will be paid for by the loss of water resources. Our experience and knowledge, especially with respect to ground water basins, dictates an expansion of monitoring and surveillance and an increase in regulatory activity.

We recommend you restore federal participation in water pollution control regulation to at least its former level of $52 million. We support ASIWPCA's proposal that an even higher amount be seriously considered.

Without adequate federal support, we will be forced to return delegation of the NPDES program to EPA. It makes little sense to retain the paperwork of the program without the resources to implement the substance.

Secondly, we ask that the Congress take this opportunity to remedy a serious defect in the allocation system for 205(g) and 106 funds. Ironically, California suffers because it does a good job with the money you give us. In order to forestall inflationary cost increases, the money is put to use rapidly. We have no reserves. When the Congress fails to pass an appropriation bill for many months into the fiscal year, as you did this year, California

must dismantle its system while other states have reserves to see them through. We are penalized for doing a good job.

We ask that you amend the Clean Water Act to permit EPA to de-obligate and transfer directly to any other state in need, any 205(g) and 106 funds unused by a state within two years of its appropriation.

California is now in the process of furloughing over 20 percent of its work force and preparing to return delegation of the NPDES permit and construction grant program to EPA due to the present inflexibility to shift funds between states. Our program suffered greatly during the past 10 months you debated the supplemental appropriation. Roller coaster funding costs the taxpayers millions of dollars, makes the program extremely difficult to administer and imposes unwelcome burdens on local government. One of our experienced administrators estimates we have built the grant administration team three times over the past ten years. It would be wasteful in this era of limited resources to do it a fourth time.

Without stable funding to administer the grant program, California will be forced to return the grant program to EPA, dissolving the once effective state-federal partnership.

On other proposed provisions of (S 2652) (HR 6670) we have the following comments:

Sec. 2. - To amend Section 301 to extend current deadlines for industrial compliance from July 1, 1984 to July 1, 1988.

Some extension in the deadline for achievement of BAT/BCT is probably advisable. However, extension to 1988 is excessive. Experience with pollution control statutes has demonstrated that deadlines tend to force compliance. Set too far in the future, however, they remove any sense of urgency. Moreover, there is no necessity for such a stretch-out in dates. EPA has agreed to complete and promulgate most BAT guidelines specified in the consent decree by mid-1983; industry should not need four more years to comply.

While there is a dramatic effect in mandating "dates certain" for compliance, it might make more sense to specify that each industry or industrial category come into compliance not later than three years after the promulgation of the relevant effluent guideline. This would, among other things, serve to spread out the workload for state and federal permit writers.

Sec. 3. - Amend Section 301 of the Act to allow all publicly owned treatment works not in compliance with secondary treatment to apply for an extension to 1988.

This is a dangerous provision and one that the Congress should consider with great care. The real issue is the extent to which the Congress wants to decouple mandatory compliance by municipalities from availability of federal funds. Or put another way, in the absence of the carrot do they still want to use the stick? While the 1977 amendment to 301(i) suggested that the availability of funding was a necessary prerequisite for compliance, Congress should very soberly consider the implications of broadening that,especially in light of the fact that continued federal construction grant money is by no means assured. Further, the President's proposed "New Federalism" suggests returning the entire program, including all future funding to the states by 1984. In light of this, the Senate and the House should be very cautious about a simple extension of the secondary treatment requirement for POTW's. At the very least, the sanitation agency should be asked to prove diligence in the pursuit of clean water goals before being exempted from regulatory action.

Sec. 4. - Provides a new subsection to Section 301 giving the Administrator authority to charge fees for processing and reviewing permits and associated applications.

This is probably a good provision, but it should be made explicit in the language that any state NPDES authorization automatically includes authority to collect fees for the use of those states in managing the program.

Sec. 7. - Revises the pretreatment provisions under Section 307(b).

California fully endorses the concept of pretreatment presently embodied in the Act. If amended, this section should not abandon the idea that the best protection of the environment is to prevent pollution at the source. EPA

should diligently pursue the promulgation of guidelines and standards for those industries having the potential for environmental harm so that states and municipalities can design effective pretreatment programs.

Sec. 10. -Provides for amendment of Section 313 expanding the scope of the President's authority to exempt federal facilities and property from requirements of the Act.

The proposed revision to Section 313(a) should not be adopted. The current system works well; military authorities are cooperative because states have the necessary authority. One example of the benefits of current provisions can be seen in the Sacramento area. The Regional Water Quality Control Board's inspections of several local military bases showed threats to ground waters from fuels and other advanced aero-space chemicals. They are being cleaned up in a cooperative effort. Without retention of clear state authority, the motivation for this cooperation would be lost.

Sec. 11.- Amend Section 316 to modify the thermal discharge modification test to remove the term balanced "indigenous" population.

California opposes this revision because it will allow a less stringent standard be applied to thermal discharges which could significantly change the character of the receiving water. Present language of Section 316 is adequate and should be retained.

Sec. 12.- Amend Section 402 to extend the present NPDES permit term to ten years.

California has no problem with the present five-year permit period. However, if a longer permit period is adopted, the permitting authorities should have substantial discretion to reopen the permit before its expiration time. Consideration should be given to allow for waivers of NPDES permits for insignificant discharges. We have discouraged issuance of permits for such things as air conditioner condensate and overflow from esthetic fountains and pools.

Before closing, I would like to add that the bill before you does not propose changes to Section 404 of the Act. California supports the present language of this section and asks that you deny any attempts to weaken this section.

Summary

We also ask that you deny attempts to cut back the Clean Water program in the guise of the "New Federalism." First of all, the Clean Water program already has extensive federalist principles built into the law. The strong working partnership between EPA and California has proven effective. Major revisions of responsibilities and authority are not needed. Secondly, in terms of the national budget, the money saved is minimal, yet EPA proposes to put the enforcement program on a starvation diet.

We have a workable program if we have the wisdom to let it work and make available the modest resources it needs.

Again, I appreciate the opportunity to appear today.

STATEMENT OF D. MONTE PASCOE
EXECUTIVE DIRECTOR,
COLORADO DEPARTMENT OF NATURAL RESOURCES

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

CONCERNING AMENDMENTS TO THE
FEDERAL WATER POLLUTION CONTROL ACT

Washington, D.C.
July 28, 1982

Thank you for the opportunity to comment about the need to modify the Federal Water Pollution Control Act so that a release of water from a dam, by itself, is not regulated as a discharge of any pollutant under the provisions of Section 402 of the Federal Water Pollution Control Act.

I am informed there are about 2.3 million dams in this country. Thousands of these are in Colorado. Most of the Colorado dams play an integral role in the state's development and management of its scarce water resources. Colorado's cities, counties and other public agencies are charged by law to provide for their citizens' health, safety and welfare. A key component of that broad public function is providing water for domestic household use, for agriculture and other purposes.

When man impounds water, either in a naturally occurring stream or, as is often the case in the arid West, in

an off-stream impoundment, changes in the water's movement, flow and circulation will occur. The nature of such effects in a particular impoundment are a function of its unique topography, climate and hydrology. Thus, for example, some impoundments can cause the impounded waters to be warmer or colder and to have more or less dissolved oxygen than the water would have without the impoundment. These occurrences are neither newly discovered nor particularly significant in environmental impact. Many of our natural mountain lakes display the same characteristics.

Nonetheless, for many years we in Colorado have been alert for these potential impacts at the state and local levels where these uniquely local impacts would likely occur and where a sound public policy can be formulated which balances the control of such impacts with the state's critical need to develop and husband its scarce water resources.

A few months ago, a Federal District Court in Washington concluded that the Nation's dams, including those in Colorado, had been operated in violation of federal law for years because they did not have, and four Administrations in Washington had advised them that they did not need, so-called "point source" discharge permits. We understand that this committee is considering legislation to restore the status quo by overturning that decision.

There is exceptionally strong support in Colorado of a bill to overturn the court decision and oppose any effort to create a new, federal regulatory program for water discharged from dams. The Fifty-third General Assembly of the State of Colorado recently adopted a joint resolution requesting that Congress amend the Federal Water Pollution Control Act to restate its intent that water quality changes caused by dams do not require point source permits. The Colorado Water Quality Control Commission and the Colorado Water Conservation Board have taken similar action.

In our view, neither point source permits nor some new federal regulatory mechanism for water flowing over dams is necessary or appropriate. First, both Colorado and the balance of the United States have environmental objectives yet to achieve which are far more important than any of the impacts of water flowing over dams. Toxic substances, hazardous waste disposal and similar matters pose much more important environmental, and possibly public health, concerns than do dams. Those programs, which this Congress created by adopting toxic substances and hazardous waste legislation and the new Superfund, have yet to begin in any meaningful way.

Unfortunately, the environmental agencies of Colorado and the Federal Government are now faced with far greater tasks than in the past, and substantially reduced resources to do the job. In addition to toxic substances, hazardous waste

and Superfund, Colorado, and other states, and the U.S. EPA now face the job of processing renewed NPDES permits for over 40,000 industrial point source discharges across the country.

In the spectrum of pressing environmental problems, the water quality impacts caused by dams are a relatively small concern. The water quality effects of dams pose none of the public health concerns which these other areas of needed control necessarily raise. Moreover, the environmental effects of dams tend to be localized, intermittent and best controlled through existing state and local authority.

In Colorado, for example, dams have not caused any serious water quality problems. In the many years that the Colorado Water Quality Control Commission, the Colorado Water Conservation Board, the Colorado Division of Wildlife and the Colorado Division of Parks and Outdoor Recreation have been alert for such impacts, there have been few, if any, fish kills caused by dam-induced water quality changes. Thus, Colorado's dams do not cause serious water quality impacts.

However, even in the unlikely event that such serious impacts did occur, existing state regulatory mechanisms are sufficient to remedy any such problems. Section 25-8-205(1) of the Colorado Revised Statutes expressly authorizes the State Water Quality Control Commission to promulgate mandatory "control regulations" on any activity, including the water flowing through, over or around a dam, "that does cause the

quality of any state waters to be in violation of any applicable water quality standard."

Not only are dam-related water quality effects adequately addressed by existing state authority in Colorado, but as a matter of public policy, any such effects are best addressed at the state and local levels. A proper regulation of dam-induced water quality changes necessarily depends on two uniquely local matters. First, dam-induced water quality changes are a function of local topography, local climate and local hydrology. Second, in the case of water resource impoundments, the proper balance between environmental control and water resources can best be struck by the local people who have to live with that environment and with its water resources.

Any new, federal programs to control dam-induced water quality changes with national permits or standards, would necessarily displace these existing and more appropriate mechanisms. Moreover, in pursuit of relatively small, if any, environmental benefits, it would undoubtedly impose substantial new costs on state and local governments. In Colorado alone, even a modest monitoring program for the thousands of dams in the state would cost a staggering amount of money. In the case of water resource dams, absent such federal funding, this new economic burden would be borne by the state and its cities and public agencies. With the demands being made for

Association of State and Interstate Water Pollution Control Administrators

TESTIMONY PRESENTED

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

BY

ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS

July 28, 1982

Hall of the States • 444 North Capitol Street, NW, Suite 330 • Washington, D.C. 20001 • (202) 624-7782

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Association of State and Interstate Water Pollution Control Administrators

Mr. Chairman, Members of the Subcommittee:

My name is James Edward Brown. I am Director of the Water Quality Division of the Iowa Department of Environmental Quality. I am here today representing the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) of which I am the Vice President. Accompanying me is Ms. Robbi Savage, Executive Director and Secretary-Treasurer of the ASIWPCA.

ASIWPCA is a national independent, non-partisan organization of State administrators of the water quality program. ASIWPCA members represent the organizations which, on a daily basis, implement the Clean Water Act and frequently other environmental legislation as well. All 50 States, 6 Interstate Agencies, 3 Territories and the District of Columbia are represented within the Association.

The members of ASIWPCA wish to compliment this Committee and the Congress for acting expeditiously in passing the Clean Water Act Amendments of 1981. These amendments are an important milestone in the State, National and local efforts to achieve and maintain clean water. For too long, the clean water program has been encumbered by requirements, policies and guidance being continuously established, revised and revoked. Given the already complex nature of the program, the constant changing of the rules which governed it has resulted in a seemingly never-ending process of readjustment. This often slowed rather than enhanced progress toward achieving the Clean Water Act's goals. Our Association supported the Administration and Congressional efforts to reduce program oversight, improve program management and focus on water quality and we were pleased that the amendments enacted were, by and large, responsive to State concerns.

ASIWPCA members, many of whom have been managing water quality programs since before enactment of the 1972 amendments, are thoroughly familiar with the strengths and weaknesses of the Clean Water Act. Our members agree that the existing law is fundamentally sound and that substantial improvement in water quality has been achieved over the past decade.

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We are pleased that the Administration, in proposing to amend the Act, has addressed only a limited number of components. Repeated changes in direction and emphasis hamper our efforts to implement cohesive, effective programs. While some amendments are appropriate to resolve operating difficulties, ASIWPCA endorses a narrowly focussed bill.

The States have consistently endorsed the Federal/State partnership reflected in the Clean Water Act. In passing the 1972 law, Congress determined that the Federal government and the States would administer the program on a complementary basis: States would manage the Federal program through delegation while US EPA would establish minimum ground rules and fill in where States did not assume responsibility. Interstate Agencies would address regional needs that could not be adequately met by the Federal government or individual States. This approach is, of course, wholly consistent with the Administration's Federalism proposal.

A. MANAGEMENT ASSISTANCE UNDER SECTION 106

No aspect of the Clean Water Act is more fundamentally important to the objectives than Section 106. The cooperative State/Federal partnership created under the 1972 Amendments depends upon each partner living up to its end of the commitment. As the deadlines in the Act approach and as the program grows in complexity--for example, through implementation of toxic pollutant controls--it is more important than ever that the States can be confident of sustained and adequate Federal financial support.

The Association agrees with the Administration that a 5 year reauthorization of this commitment is one of, if not the, most important feature of their bill and that we must send a strong signal to the States on the certainty and stability of this partnership.

The Administration has proposed reducing the authorization level for Section 106 grants to State Management Assistance in FY83. Whereas Section 106 grants were authorized at $75 Million for FY82, the Administration recommends reducing the level to $40.9 Million in FY83--i.e. 20% below the FY82 appropriation level of $51.2 Million. The bill is silent on the out years. The ASIWPCA believes this proposal provides neither the certainty, stability, nor partnership commitment necessary to fulfill the objectives of the Clean Water Act.

Section 106 funding was intended to provide the incentive for States to voluntarily assume a partnership role in management under the Act. Activities funded by Section 106 formed the core of the Federal water program, for example, water quality planning, NPDES permitting, compliance, enforcement, and monitoring. This funding was a crucial link in the strategy under the 1972 Act which preempted many State activities.

Since 1972, program requirements have increased (e.g. pretreatment, water quality standards reviews). Simultaneously, emphasis has shifted to include the more costly area of toxic pollutants. State contributions to the program have doubled nationally whereas the Federal commitment to this expanding Federal interest has remained relatively constant. The implications, in terms of real dollars, have been painfully evident in the States which have responded with cost-saving measures

and careful prioritization. Since there is very little, or no, fat left in the State programs, it is essential that States have the flexibility to allocate their resources based on public health and environmental needs. A balanced water program depends on that capability. Any effort to dedicate 106 funds to a particular activity, such as has been proposed for Attorneys General nationally, by the National Association of Attorneys General, undercuts the broader program interests, e.g. drafting well grounded, defensible permits or assuring technical support so fundamental for sound enforcement actions.

While the Administration advocates Federalism and increased delegation, inflation and declining levels of Federal commitment will make it extremely difficult, if not impossible, to achieve those objectives. The Governors' responses to the joint ASIWPCA/NGA survey on the impacts of potential federal budget cuts on State water programs provide some insight. (See attached summary overview):

- States targetted budget cuts based on priority rather than a straight percentage for all activities in the water program.
- States want to preserve their permitting function as much as possible.
- A 20% reduction in Federal resources would be felt most heavily in several program elements which are much smaller than permitting. Compliance, enforcement, and technical assistance would be drastically curtailed. Planning and monitoring were also frequently targetted. The effects of such cutbacks are cross-cutting because implementation of the water program depends upon this basic analytical capability.
- A 20% cut would cause permitting delays that exascerbate an already substantial backlog.
- Permit fees are not a practicable solution in the short term. Major economic, political, and policy issues are involved which will take time to resolve. For example, there may be inconsistent requirements in State law.
- While over 20 States have an interest in assuming more delegable functions, Federal fiscal incentives are generally seen as a prerequisite.
- States perceived a reduction in Federal commitment as a lower priority nationally for the Clean Water Act. While State programs have been geared to achieving national water policy, results indicate state interests would tend to take precedence over the Federal interest if the Federal commitment in funding declines.

States appreciate the economic realities Congress must address. The ASIWPCA fully supports the position of the National Governors' Association that the FY82 levels of appropriation be maintained. At the same time, we recognize the true funding needs of the program (as reflected in authorization levels) are somewhat higher. Within the existing funding levels, we are committed to seeking the savings necessary to meet our growing responsibilities. This will

challenge our creativity to the limits for there is more than ample justification for existing funding levels:

- The Federal investment in Section 106 grants is one of the best bargains to the Federal government. Clean Water Act responsibilities are far more cost effective to administer at the State level.
- States estimated in an EPA study several years ago that the resource implications of the, then current, requirements were over double a $51.2 Million appropriation level. Reforms to the program can lead to cost savings, but the limits are readily apparent.
- The new Water Quality Standards requirements of the 1981 Amendments and the upcoming toxics monitoring and control needs will require substantial additional resources. The Association projects that an additional $25 Million would be required just to factor toxics into the water quality based program.

The Administration has suggested that less §106 funding is necessary because §205(j) and §205(g) funding can be used to offset that reduction. The Association takes strong exception to this claim. While all of these funds are to some extent interchangeable, they are targetted under the Act to very different and distinct legal requirements which meet or exceed what can be accomplished with the funding available:

- Both set asides under §205 of the Act divert resources from the Title II objective--i.e. construction of sewage treatment facilities.
- Full delegation of the construction grants program will require the complete commitment of §205(g) resources. This massive program is now approximately 60% delegated to the States.
- §205(j) funding will be barely adequate to implement the new standards requirements of the 1981 Amendments and to make incremental progress toward a toxics control strategy. Both of these activities are in addition to those supported by the baseline Section 106 water program.

The Federal government, States, municipalities and industry have collectively made huge investments in protecting and improving water quality. We should all be very proud of that achievement. A sustained level of Federal commitment to the national water program is necessary to ensure that this investment is protected and the State/Federal partnership is maintained.

ASIWPCA RECOMMENDATION

- Section 106 should be reauthorized providing no less than $75 Million annually for FY83-87.
- Although State management needs are significantly greater, a minimum of $51.2 Million should be appropriated in Section 106 for FY83 to enable States and Interstate Agencies to carry out the Federal water program.

- §205(g) and §205(j) funds are not a substitute for adequate Section 106 funding. The set asides under Section 205 were intended to be dedicated for special purposes outside the baseline water program supported by Section 106.

B. CIVIL AND FELONY PENALTIES

These proposals would expand US EPA's enforcement arsenal at a time when the Agency's expressed intent is to expand the States' primary responsibility for the water quality program. It is true that the prospect of strong US EPA enforcement could serve as a threat that States could use to secure quicker settlement of permit violations. It is equally likely, however, that the potential for later action by US EPA would interfere with program implementation authority and hinder correction of discharge violations.

Under the existing program, an NPDES-delegated State that has discovered a permit violation can impose a civil or criminal penalty against the violator and establish a schedule for clean-up. However, we can foresee the prospect that industries will refuse to negotiate with State officials on a schedule because of concerns that a settlement could constitute acknowledgement of wrongdoing which could make them subject to another level of civil or criminal penalties imposed by US EPA...i.e. "double jeopardy."

ASIWPCA recommends that the legislative language of Sections 8 and 9 protect the enforcement capabilities of States with delegated NPDES permit authority by requiring EPA consultation with the States prior to initiating action or specifying that the penalties can be imposed only when a State has failed to impose appropriate sanctions.

While some States may wish to establish equivalent State provisions, it should be made clear in the law that the adoption of provisions equivalent to the proposed authority for felony and civil penalties is not a condition for continued State management of the NPDES permit program or a new requirement for States that have not already sought program approval.

C. FEDERAL FACILITIES

ASIWPCA opposes Section 10 of the proposed bill which would expand the exemptions from compliance with the Clean Water Act available to government owned or operated facilities. In our view, it is totally inequitable for the Administration to propose tightening the penalty provisions applicable to industrial and municipal dischargers while simultaneously allowing potentially unlimited discharges from government facilities.

ASIWPCA believes that Section 313 of the Clean Water Act provides adequate allowance for Federal facilities to obtain exemption from the Act's requirements. We do not support broadening such exemptions to permit discharge of toxic pollutants nor to allow unlimited discharges by new sources. Furthermore, the expansion of coverage for such exemptions--from facilities "owned or operated

by the Armed Forces of the United States (including the Coast Guard) or by the National Guard or any State and which are uniquely military in nature--to facilities "owned or operated by the United States or by the National Guard of any State and which are essential to the national defense," as Section 10 proposes, is totally unwarranted. If the goals and objectives of the Clean Water Act are to be met, it seems to us imperative that its coverage be as broad and as uniform as possible.

D. THERMAL DISCHARGES

Similarly, ASIWPCA opposes Section 11 of the bill which would expand the potential modifications from thermal discharge limitations and cooling water intake structures under Section 316. While the requirements of Section 316 were initially difficult to establish and implement, States believe that this program is now well structured and stable. Changes in its coverage would merely disrupt momentum in progress toward achieving the Act's goals.

E. NPDES PERMITS AND DELEGATION

ASIWPCA recognizes and supports the concept of stability of program requirements that is the basis of Section 12's proposal of a 10 year term for permits. Expanding the term of permits may not achieve that objective, however, since the adoption of effluent guidelines or some other action may necessitate permit modifications during the permit term. The ability to reopen a permit for cause must be maintained.

Although a 10 year permit period is acceptable, there is some value to more frequent review of permit conditions, discharger performance, changes in process or expansion of operations. This is an important value to consider in amending the law. Such review can take place within the 10 year period but more informaly.

Allowance for 10 year permits should not preclude a State's opportunity to review each discharger's performance and to evaluate changes in process or expansion of operations. Such evaluation would not automatically mean that a significant modification to the permit would be required.

While we agree with aspects of Section 13 regarding partial NPDES program assumption and return, ASIWPCA believes that the Administration's bill does not reflect the attitude of partnership which should be embodied in the clean water program. In our view, EPA should be able to take full advantage of State good will in voluntarily managing the maximum possible number of program components. States should be able to negotiate any suitable arrangement with the Agency that would allow optimal distribution of workload and best utilization of resources.

Thus, while we concur with the bill's language providing for partial delegation of "significant and identifiable" parts of the permit program and requiring State commitment to making "all reasonable efforts to assume full administration," we do not believe States should be obligated to assume full program delegation within five years. Realistically speaking, insitutitonal forces may make such total assumption infeasible, and we do not see the benefit of mandating it.

In the same vein, we have difficulty in understanding how the bill's prohibition of partial program return would be advantageous to EPA, to the States, or to the clean water program. If institutional constraints preclude a State from effectively managing the entire NPDES program and it is necessary that some portion be returned to US EPA, it should be possible for this action to be taken without requiring a complete turnback. The all-or-nothing approach is inconsistent with the concept of partnership and is an obstacle to the best use of limited State and federal resources.

F. EFFLUENT LIMITATION MODIFICATION FEES

Section 4 of the Administration's bill deals with the imposition of fees for processing applications to modify effluent limitations. ASIWPCA's reservation about this provision focuses on its narrow scope. In its support rationales for budgetary reductions in the Section 106 State Management Grants, US EPA contends that States can compensate for reduced federal support by the imposition of permit administration fees. Over the years, this has been a bipartisan proposal by the Office of Management and Budget. If the Agency anticipates that States will utilize this revenue augmenting mechanism, we are unclear why they are not proposing a comparable fee system for permit applications in non-delegated States where they retain jurisdiction. Recognizing the complex nature of such systems and the intricacies of establishing suitable fee structures, we suggest it may be appropriate to develop the concept more thoroughly through joint Federal/State deliberations before legislative amendments are proposed.

G. PRETREATMENT

1. Background

Congress established pretreatment requirements to assure that indirect industrial discharges did not interfere with POTW operation, sludge management, or ambient water quality. States fully support Congress in recognizing that pretreatment is a necessary element of the water quality program.

It is generally acknowledged that the pretreatment program which has evolved is unworkable and unduly burdensome for States as well as for local communities and industry. In its current form, pretreatment requirements bear little relationship to water quality need. While States think the existing program is a serious impediment to their ability to develop and implement an effective toxics management strategy, these problems can be remedied without losing program momentum.

Pretreatment is not a new phenomenum tied solely to the Clean Water Act. Many local programs were already in operation when the Federal regulations arrived in 1978. States have been concerned with pretreatment because they are responsible for assuring protection of public health and environment statewide and actually manage pretreatment programs for many municipalities.

2. Administration's Bill

The Administration should be commended for its efforts to address the problems with the current pretreatment program. Their recognition of "equivalency"--i.e. that alternatives to the Federal approach are acceptable which achieve the same level of environmental protection--is a major milestone. However, States have several reservations about the approach taken toward that objective in the Administration's bill. It is extremely difficult to dictate nationally specific program criteria without perpetuating past program ills unduly limiting State flexibility to address specific problems. The bill complicates an already overly complex and burdensome program. In the effort to tinker with this and that program "gear," the proposal loses sight of the ultimate objective, i.e. environmental protection, and what is needed to make the pretreatment program work. Categorical standards, "equivalency" (or certification), secondary treatment, Water Quality Standards, State management needs, and local responsibilities are important factors which should be addressed in that broad context. States fear the net effect of the Administration's proposal will be further slippage in toxics control.

3. ASIWPCA Observations

In putting forth recommendations to this Committee, the Association makes the following observations. We believe categorical standards can be useful as a regulatory tool. The basic program development activities should continue to be required since they are necessary in any meaningful pretreatment program. States and local communities should have full opportunity to use alternatives to the Federal approach. This concept of "equivalency" must be predicated on end-of-system and interference based controls which, taken together, will be adequate to protect POTW operation, sludge, and water quality from harmful toxic effects. Of course, adequate monitoring, reporting and enforcement oversight must be maintained in the NPDES process. The ASIWPCA position on the pretreatment program has the following advantages:

- full benefit can be taken of the effective local programs now in place;
- the limited resources can be allocated where pretreatment is necessary;
- local communities and States will be able to tailor their programs to solve their toxics problems in an efficient, cost-effective manner;
- administrative burdens can be minimized; and
- program momentum can be maintained.

4. Resolution

The Administration's bill proposes reforms which, though they represent progress, are not as good as the pretreatment program deserves. This may reflect the complexity of the issues. The Association's recommendation builds on the Administration's proposal and, we believe, more effectively addresses the administrative problems in the program without jeopardizing environmental objectives. If further dialogue is necessary over the next year to resolve the issues to the satisfaction of Congress, the public, States, local communities, and industry, the Association would prefer to take that time rather than secure a quick legislative fix which may lead to problems in the long term.

ASIWPCA RECOMMENDATION

Pretreatment programs should be required as necessary to protect POTW operation and the environment (effluent, water quality and sludge). States and local governments should have flexibility in developing and implementing pretreatment programs, subject to approval. Specifically, the Clean Water Act should:

- continue the US EPA effort to develop the national categorical standards;
- provide concurrently a three-year period in which "equivalent" programs can be developed as an alternative to the Federal pretreatment program;
- allow States a three year period to demonstrate to US EPA which POTWs do not need a pretreatment program beyond conventional sewer use/user charge and NPDES controls;
- continue to require States and POTWs to: obtain and maintain a baseline industrial survey; characterize POTW influent, effluent, and sludge; and design local industrial monitoring programs.

H. MUNICIPAL AND INDUSTRIAL REQUIREMENTS

The 1972 Amendments to the Clean Water Act made sweeping changes in the national policy on industrial and municipal wastewater control. A balance was struck between a water quality and technology based program. That strategy, ten years later, continues to be fundamentally sound. In the interim, substantial progress has been made in pollution abatement. States and Interstate Agencies take a certain pride in the fact that thousands of stream miles have been cleaned up, groundwater protection strengthened, and point and nonpoint sources controlled. Water quality has been maintained and enhanced during a time when the sewered population and industry expanded substantially.

Although the objectives of the Act are reasonable, mid-course adjustments should be made in the approach taken toward their achievement. We have learned a great deal since 1972 about pollution, abatement and control, and effective management techniques. Circumstances have changed. Resources have become increasingly constrained. We have had mixed success in meeting some of the specific municipal and industrial requirements.

1. Compliance Deadlines

States have had mixed success in meeting the Clean Water Act's compliance deadlines. Industrial compliance with the Best Practicable Treatment (BPT) has been very successful. The same cannot be said for BAT deadlines or municipalities' requirements.

BAT Deadlines--States had substantial difficulty in requiring compliance with the 1977 BPT deadline due to delays in guideline issuance. Such problems can be expected to be even more pronounced for BAT. While the Administration has

proposed a simple deadline extension, the Association believes the credibility of the water program is jeopardized by reliance on arbitrary deadlines. It has been difficult, if not impossible, to establish a deadline which accurately anticipates the complex policy, administrative and legal problems which inevitably result in delay. Arbitrary deadlines have not been an effective inducement to guideline issuance either. We suggest it would be more appropriate and useful to the program if guideline issuance triggered compliance deadlines.

Municipal Deadlines--The Administration proposes to extend the 1977 municipal deadline under Section 301(i) of the Act to 1988. This is reasonable, given the decline in Federal support and the changed eligibilities under the 1981 Amendments. However, the proposal only responds to part of the problem -- aside from the sometimes unsurmountable difficulties States have had in trying to use the 301(i) process, 301(i) only applies to facilities which received Federal funding and finish construction by 1988.

The bill does not address the very large class of municipalities which will not receive Federal funding or complete construction by 1988. These communities in good faith expected to participate in the Federal program under the Act. Changed circumstances will require major realignments in their planning. They could benefit substantially from closer coordination of planning, construction grants, permitting and compliance elements of the national water program. Within that framework, States should be able to develop a compliance strategy.

This void in the Administration's bill could be filled by adding a provision which provides for a case-by-case extension of municipal compliance deadlines to 1988 where the community has acted in good faith but cannot secure the Federal funding in time to comply by 1988. Such communities would be required in their permits to meet reasonable effluent limits and other applicable requirements (e.g. those for pretreatment). They should be encouraged to complete facility and capital investment plans in line with their capabilities.

2. Toxics Management Strategy

The Act has a sound conceptual framework within which toxic pollutants can be addressed. However, considerable reliance is placed on a single element -- BAT guidelines -- to accomplish more comprehensive needs related to the development and implementation of those toxic controls.

In 1972, a two phase technological effort was perceived as appropriate. BPT was to control conventional pollutants. BAT was to be applied later to control toxics. We have learned a great deal in the implementation of this effort. BPT has provided a sound baseline for the national water program. In removing conventional pollutants, it also provided an unexpected bonus -- i.e. a front line of protection against toxicity related impacts. Whereas application of BPT was fairly straight forward (once there were guidelines), BAT will require a substantially higher order of technological sophistication. Toxics management is at the "cutting edge" of the state-of-the-art.

The Association is concerned that toxics management strategy in the law encompasses more than just a continued reliance on BAT guideline issuance. States believe we should strive toward controlling toxic pollution where it poses an unacceptable risk to public health and the environment because of acute or chronic effects. We are concerned that the information base on toxics in many instances is inadequate to make informed decisions. Nationally uniform categorical standards may be neither feasible nor fully appropriate for toxics management.

Several refinements in the Act are desirable to more effectively and comprehensively provide for toxics management:

- As we await completion of BAT effluent guidelines, the time could be productively used through the permit process to monitor for toxics (particularly biological effects), evaluate facility processes, and institute reasonable management practices (good housekeeping, etc.). Some progress could thus be made in toxics management. States will have vastly improved information on which to base toxics control decisions once BAT guidelines are issued.

- "Equivalency" is a concept whose time has come in the water program:

  --National guidelines may be neither feasible nor appropriate for some industries because of the high level of variability or sophistication of process. This, however, should not inhibit progress. States should be able to use best professional judgement to apply the appropriate level of control in lieu of BAT.

  --The phased technology approach (i.e. conventional vs. toxics controls) is an overly simplistic hierarchy which does not fully take account of the ultimate objective -- i.e. toxics removal. Congress should consider a "BAT equivalency" approach. The appropriate level of toxics removal, not a technology per se, should be the determining factor. Technologies can vary in expense and sophistication, but yield substantially equivalent results in terms of environmental protection. It is not inconceivable, in some instances, that BAT removal rates will be very close to those achieved under BPT.

3. BCT

The Administration's bill recommends extending the compliance deadline for BCT to 1988. The proven effectiveness of BPT in abating pollution calls into question the need for continuation of national BCT requirements. Water quality need should be the basis for going beyond BPT for conventional pollutants. This is a manageable workload which will enable States to make more cost effective investments in pollution abatement.

ASIWPCA RECOMMENDATIONS

BPT

Maintain BPT as the minimum national treatment requirement for industrial dischargers.

MORE STRINGENT REQUIREMENTS

- Conventional Pollutants: Treatment beyond BPT for conventional pollutants should be based on water quality considerations.

- Toxics Management Strategy:

  --Pollutants should not be discharged in quantities which may reasonably be anticipated to pose an unacceptable risk to public health or the environment because of acute or chronic toxicity.

  --US EPA should promulgate as rapidly as technically prudent the national categorical standards for BAT wherever feasible. An effort must be made to control toxic pollutants and avoid "treatment for treatment's sake."

  --Best professional judgement should be an alternative to BAT in appropriate (and limited) industrial categories/facilities.

  --In the absence of BAT and BPJ, NPDES permits should be reissued requiring appropriate:

  - o toxics monitoring;
  - o special process evaluations; and
  - o best management practices.

DEADLINES

- Industrial

  BAT compliance should be required no later than 3 years after establishment of an effluent guideline.

- Municipal

  Compliance requirements should more reasonably reflect water quality considerations, construction grants funding, and justified NPDES permit and enforcement actions. Therefore, municipalities that are not fundable under a construction grant should be allowed an extension until 1988 to comply. States should be able to use the NPDES permit program to tailor an expeditious, but reasonable, schedule of improvements that will ensure that each community ultimately achieves the level of treatment required by the Act.

NORTH AMERICAN LAKE MANAGEMENT SOCIETY

P.O. Box 68
East Winthrop, Maine 04343

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Winthrop, Maine

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STATEMENT OF
THOMAS U. GORDON, PRESIDENT,
NORTH AMERICAN LAKE MANAGEMENT SOCIETY
BEFORE THE SENATE COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS,
ENVIRONMENTAL POLLUTION SUBCOMMITTEE
Wednesday, July 28, 1982

Mr. Chairman and Members of the Subcommittee, I am pleased to be able to present testimony today regarding the Federal Clean Water Act and its relevence to our nation's lakes. In the course of these hearings, you have no doubt heard a great deal about possible revisions to our national water pollution control programs. Much attention has been devoted to our progress in improving the water quality of our nation's rivers, streams, and coastal areas. But too little has been said about the specialized problems of our freshwater inland lakes and ponds.

The North American Lake Management Society is here today to advise you of the specialized water pollution control requirements that result from the unique water quality characteristics of lakes and ponds. The Society wants to stress that the unique aspects of lake water quality improvement should be recognized in the Clean Water Act through specific provisions authorizing programs which address these lake water quality problems. In the present Clean Water Act, sections 104(h), 304(j), and 314 provide the basis for our national lakes program, and should be reauthorized.

The President's Council on Environmental Quality has noted that more than 10,000 public lakes need pollution reductions or restoration. Of the 3,700 urban lakes in the nation, about 80 percent

have been estimated to have significant water quality problems from toxic substances, algae, aquatic weeds, and sedimentation. Across the country examples of these problems exist in most every state: devastating algal blooms in Deer Creek Reservoir in Utah; PCB contamination in Pine Lake in Arkansas and in Fort Loudoun Lake in Tennessee; low dissolved oxygen and aquatic weeds in McNeely Lake in Kentucky; and serious sedimentation in Moon Lake in Mississippi. The common thread among these problem lakes was an interest in obtaining help from the Clean Lakes Program.

While the nation can be proud of the progress in cleaning up conventional pollutant problems, very little progress has been made in dealing with nutrient overenrichment and toxics problems in our nation's water. The fundamental thrust of the nation's water quality improvement program has been to control pollutants at their source. Unfortunately, this strategy ignores the build-up of pollution problems that still remains after years of few controls. While rivers can recover from past pollution by flushing pollutants downstream (often to lakes and reservoirs), lakes accumulate pollutants and may continue to have water quality problems after the pollution source has been controlled. Only the Clean Lakes Program deals with these accumulated pollutants, and water quality goals set by Congress will not be achieved in lakes across the country unless Congress provides a mandate that a cost-effective lake restoration and protection program be continued.

These lake pollution problems are national problems, rather than just state or local problems. A lake receives pollutants from its entire watershed, which crosses local and state jurisdictions in many cases. In fact, almost 50 percent of our country's land area drain to lakes. Kentucky Lake on the Tennessee River receives pollutants from

seven states, more than 100 counties, and hundreds of local jurisdictions. Only basinwide controls of both point and nonpoint source pollution, involving local, state, and federal cooperation, can solve these types of pollution problems. Elimination of the technical expertise available on the federal level through EPA's Clean Lakes Program under section 314 will cripple lake cleanup initiatives.

Clean Lakes Program Accomplishments

The Clean Lakes Program was first authorized by the Federal Water Pollution Control Act Amendments of 1972. EPA implemented the Clean Lakes Program on a very small scale as a demonstration program in 1975. With growing state and local concern about lake water quality degradation, the demonstration grants for lake restoration were continued. Finally, in 1980, EPA published program regulations for the Clean Lakes Program pursuant to section 314. Prior grants had been made primarily from section 104(h), research and demonstration project funding.

As the program has developed, efforts have focused on priority pollution problems by following a rationale that should be part of other environmental programs: first, states develop a priority survey of problem lakes, using "classification grants"; second, diagnostic-feasibility studies ("phase 1 grants") are conducted for high-priority lakes to determine the cause of lake water quality problems and cost-effective solutions to these problems; third, the most cost-effective projects are implemented, using sound restoration and protection methods ("phase 2 grants"). Forty-seven states have participated in the program, and thirty-eight have completed their lake classification surveys, which will be invaluable for future water quality management efforts.

Another major accomplishment of the Clean Lakes Program is that it has emphasized the implementation of lake restoration and protection practices, rather than just studying problems indefinitely. Over 87 percent of the total Clean Lakes funding has been devoted to "Phase 2" implementation projects, while about 7 percent has been spent on diagnostic-feasibility studies. Furthermore, a 1980 investigation into the costs and benefits of the Clean Lakes Program found it to be one of the more cost-effective government programs, with a return of eight dollars in public benefits for every federal dollar expended. The details are available in EPA report # 440/5-80-081, "Economic Benefits of the Clean Lakes Program".

Clean lakes success stories have come from around the nation. In Collins Park Lake in New York, urban best management practices were installed to solve siltation and nutrient problems. In Spiritwood Lake in North Dakota, farm practices were encouraged to resolve aquatic weed and algal bloom problems plaguing the lake. Siltation problems were solved in North Park Lake in Pennsylvania, and nutrient and sediment problems contributing to cultural eutrophication of Lake Tahoe were addressed in Washoe County, Nevada.

My own agency, the Cobbossee Watershed District in Winthrop, Maine, has made substantial progress in restoring its lakes. Ten years ago, the visibility of Annabessacook Lake was less than 2 feet, with a heavy scum of blue-green algae throughout the summer months. With assistance from the Clean Lakes Program, the Cobbossee Watershed District controlled animal waste runoff from farms in the lake's watershed and treated the lake with aluminum sulfate to eliminate internal recycling of the nutrients that were causing the algae blooms. Today, those scums are gone, the water is clear, and the local economy is benefitting from a natural resource that once seemed lost. None of this would have been possible without the help we received from the EPA Clean Lakes Program.

Lakes Research and Evaluation

The North American Lake Management Society recently sent a questionaire to state agencies that have participated in the Clean Lakes Program. In addition to their strong statements in support of the Clean Lakes Program itself, most states indicated a critical need to further develop and improve the tools for assessing lake water quality problems and restorative measures. In this regard, we strongly urge a continuation of EPA research efforts on lakes and lake restoration. For example, the EPA laboratory at Corvallis, Oregon, has developed a statistical experimental design that would provide an evaluation of various pollution control and lake restoration techniques, considering sources of pollution, lake types, and geographic locations. This type of research should be encouraged by reauthorization of section 104(h) of the Clean Water Act. The knowledge developed would be extremely valuable to lake managers as they attempt to choose cost-effective pollution control and restoration measures for their lakes.

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Furthermore, the Society strongly believes that EPA should continue to report to the Nation on the state-of-the-art of lake restoration technology, pursuant to the reporting requirements of section 304(j) of the Clean Water Act. Lake restoration is still in its infancy; while sewage treatment technology has been evolving over a number of decades, lake restoration projects have only been implemented in the last 10 to 15 years. In meeting its reporting requirements under section 304(j), EPA has sponsored several national conferences on lake restoration, protection, and management. The proceedings of these conferences have been widely read and cited in the development of new lake projects. The conferences held in 1978 in Minneapolis, Minnesota, and in 1980 in Portland, Maine, provided valuable opportunities for exchange of lake restoration information, which allowed state and local lake managers to avoid mistakes of previous lake projects and to develop more cost-effective solutions to their problems.

Thus far this year, EPA has given no indication that it would continue its series of lake restoration conferences as a means to meeting its 304(j) reporting requirement. Thus, the North American Lake Management Society has committed itself to conducting a 1982 lakes conference this fall in Vancouver, British Columbia, although our resources are far more limited than those of EPA. We urge that the Subcommittee reauthorize the 304(j) reporting requirement, so that there will again be some national coordination of effort by EPA on the ongoing efforts to improve lake restoration and protection techniques.

Impact of Other Clean Water Act Provisions on Lakes

While sections 104(h), 304(j), and 314 are obviously related to lake water quality problems, many other sections of the Clean Water Act of 1977 have some impact on lakes. The North American Lake Management Society has reviewed the entire Act to determine its effectiveness in improving water quality on lakes and ponds throughout the Nation. The results of this review and our recommendations to this Subcommittee on amendments to the Clean Water Act follow this statement. We encourage you to consider these suggestions as you develop revisions to the Act.

More than one half of our Nation's population lives within five miles of a publicly owned lake. The public demand for clean lakes is increasing, while one-third of our lakes are severely degraded and many more are deteriorating. If the unique water quality program needs of lakes continue to be recognized in the Clean Water Act, we can reverse this trend and insure that future generations will also enjoy the benefits of these vital water resources.

ADDENDUM TO WRITTEN TESTIMONY: NORTH AMERICAN LAKE MANAGEMENT SOCIETY REVIEW OF CLEAN WATER ACT IMPACTS ON LAKES

INTRODUCTION

The North American Lake Management Society (NALMS) was founded by individuals interested in protection, restoration, and proper management of lakes, ponds, and impoundments. NALMS members--among whom are concerned citizens, lakeshore property owners, scientists, engineers, and planners--recognize that poor water quality is affecting the use of many of the Nation's urban and rural lakes. In fact, more than one-third of the 40,000 publically owned lakes greater than 100 acres in the United States are degraded by toxics, silt, algae, and weeds. With members residing in most States and Canadian provinces, NALMS has the wide-ranging expertise to comment on legislative changes that are needed to more effectively address these water quality problems and to mobilize local participation in water quality management.

In response to members' concern about continuing pollution problems, NALMS officers sought volunteers to prepare recommendations for the society on revisions to the Clean Water Act. A committee representing local, State, Federal, and private sector interests prepared a draft position statement and solicited responses from the membership. After thoughtful debate, the NALMS Board of Directors approved the following statement as the North American Lake Management Society 1982 Legislative Position on the Clean Water Act. The statement is followed by an appendix detailing NALMS recommendations for revisions to specific sections of the Act.

POLICY STATEMENT

While the Nation can be proud of the progress made in controlling conventional pollutants, much remains to be accomplished in correcting water quality problems from nonconventional and toxic pollutants. The flowing waters of rivers and streams have the ability to flush pollutants downstream and cleanse themselves once controls are implemented, but impounded and lake waters have less capability to do so, and they continue to suffer from decades of deposited pollutants. Congress recognized in 1972 that the Nation's water quality goals could not be reached without a lake restoration program to clean up this accumulation of pollutants and enacted the Section 314 Clean Lakes Program. After almost a decade of struggling in building an experimental program to demonstrate the effectiveness of lake quality restoration, the Clean Lakes Program became operational in 1980 with the publication of formal regulations. However, the program was eliminated from EPA's proposed budget in 1981.

Likewise, Congress recognized in 1972 that cost effective pollution control can only be achieved by considering point and nonpoint source abatement tradeoffs on an areawide basis as specified in Section 208 of the Act. While EPA devoted funding to nonpoint source planning, point/nonpoint source control tradeoffs were often ignored and a mechanism for ensuring the implementation of "208 plans" was never established. EPA eliminated funding for this important concept of planning cost-effective pollution abatement in 1981.

The elimination of funding for lake restoration, point/nonpoint source abatement tradeoff planning, and other activities mandated by Congress has been called a back-door repeal of the Clean Water Act by the public and by some members of Congress. NALMS recommends that Congress reaffirm the importance of such essential programs by specifically calling for their implementation in the amended Clean Water Act as well as in the Conference Report.

Clean Lakes Program

The Clean Lakes Program has demonstrated that its State-Federal partnership can motivate local participation to address pollution problems in lakes in a very cost-effective manner. NALMS strongly urges that the impaired use caused by toxics contamination, sedimentation, and excessive growths of algae and weeds (conditions that plague more than 10,000 publically owned lakes) be considered a national problem worthy of modest Federal involvement through continuation of the Section 314 Clean Lakes Program. With the increased burden of programs being transferred to the States, most of them cannot be expected to develop expertise and establish programs to provide leadership in lake restoration. Section 314 should be reestablished at its present authorization for a five-year period so that this 50 percent Federal, 50 percent local and State implementation program may be continued. EPA should be directed to encourage State assumption of the program after the five years, at which time the Federal program will sunset.

Nonpoint Source Pollution

NALMS supports the retention of a mandatory planning mechanism that will ensure cost-effective implementation of pollution controls through point and nonpoint source abatement tradeoffs on a comprehensive, watershed-wide basis. Originally established in Section 208, this mechanism must be institutionalized into the waste-load allocation, water quality standards, Construction Grants, and NPDES processes, and the planning mechanism recently established in Section 205(j) as part of P.L. 97-117 may not be sufficient to do so.

NALMS recommends that Congress address the national problem of nonpoint source pollution by requiring in Section 208 the consideration of point/nonpoint source abatement tradeoffs in watersheds with priority water quality problems. A 50 percent Federal, 50 percent non-Federal matching grant program would be established under Section 208 to conduct specific interagency nonpoint source implementation projects in urban and rural problem watersheds. The Section 208(j) Rural Clean Water Program would be reestablished as part of this cooperative, interagency approach to nonpoint source pollution.

Clean Water Act Goals

Public opinion has shown overwhelming support for retaining the goals and approaches specified for pollution control in the Clean Water Act.

NALMS reaffirms its support for the two national goals specified in Section 101, but recommends that they be modified to reflect a more realistic timeframe for compliance and to recognize the importance of controlling toxic substances. NALMS suggests that the "zero discharge" goal be modified to read "It is the national goal that the discharge of toxic pollutants into waters of the United States be eliminated by July 1, 1987" and the "fishable, swimmable" goal be revised to reflect a new target date of July 1, 1987.

Water Quality Criteria

Some industry and business groups have criticized the scientific adequacy of water quality criteria and technology-based effluent standards established by EPA. These groups wish to abandon effluent standards in favor of State criteria and standards established for local conditions. The local water quality standards-based approach to pollutant control was abandoned in the early 1970s because scientific inadequacy, insufficient State funding for monitoring and analysis, and political pressure often stymied pollution control efforts. There is no reason to believe that a return to the same system will work today, especially with new questions concerning the scientific adequacy of criteria and recent criticism by the U.S. General Accounting Office of frequently used water quality monitoring programs.

NALMS recommends that a national research program be authorized to resolve the scientific questions surrounding water quality criteria, point/nonpoint source abatement tradeoff methodologies, cause/effect relationships between impaired water use and upstream pollution sources, and methods for improving lake water quality. This would be accomplished by amending Sections 104 and 304 of the Act. Special emphasis should be placed on a cooperative effort between EPA and the States to develop regional watershed specific water quality criteria for toxics to protect designated uses. Such a nationally coordinated approach would be more cost-effective than each State duplicating such efforts. The goal would be to implement a water quality based system for establishing effluent limitations after BAT, BCT, and secondary treatment are installed over the next five years.

Technology-Based Effluent Limitations

NALMS supports the retention of technology-based effluent limitations, BAT and BCT requirements for industry, and secondary treatment for municipalities. BAT variances may be provided if bioassays and biomonitoring show no acute or chronic toxicity problems and "fishable" use designations are being attained. Case-by-case variances for secondary treatment may be given if water quality standards are not being violated and "fishable/swimmable" uses are being attained. Section 301 should be amended to specifically appropriate funding for all BAT limitations to be developed by 1984 and to set a compliance deadline of mid-1987.

Construction Grants Program

Congress established the Construction Grants program to hasten the initial construction of publically owned treatment works (POTW's). In some cases, industries and businesses that discharge into these municipal plants receive a significant public subsidy in treating their pollution problems. A recent report to Congress by U.S. General Accounting Office documented the existence of this subsidy and warned that the future successful operation of these municipal treatment works (and protection of water quality) may be in jeopardy because most municipalities are not charging adequate user fees. Most are not setting aside funding for plant replacement or improvement and other public revenues are used to subsidize operation and maintenance.

In 1972, Congress specified that an industrial cost recovery program and sufficient user charges be established so that public funds would not be used to treat industrial wastewater. Congress also mandated a pretreatment program so that industrial wastes would not overload or interfere with operation of these treatment works. In recent years, the industrial cost recovery program was eliminated and pretreatment regulations were suspended. It appears that the intent of Congress to avoid public subsidy of industrial treatment was not carried out. NALMS strongly urges Congress to address this deficiency by amending the Act to set a deadline (10 years hence) to phase out the Construction Grants Program. The amendment would contain a provision for all industries discharging to POTW's improved with Federal funds to contribute "industrial cost recovery" payments to a State trust fund for making POTW's self-sufficient. This could be supplemented by State established construction grants programs financed by sales of bonds. The amendment should specify sufficient user charges for improved operation and maintenance and national minimum standards for pretreatment programs. Industry should be required to handle toxic sludge from the pretreatment process rather than saddle the public with costly disposal of contaminated sludge. NALMS recognizes the need to streamline complex pretreatment regulations, but most municipalities cannot be expected to effectively implement pretreatment programs for political reasons without national categorical pretreatment standards.

Dredge and Fill Program

NALMS recognizes the importance of wetlands in protecting water quality and providing habitat for fisheries and wildlife resources. We oppose the current pressure from developmental groups to limit the Section 404 Dredge and Fill program to strictly navigable waters rather than the valuable headwaters wetlands they wish to develop. NALMS supports a reauthorization of Section 404 in its current form and recommends that a strong Congresssional mandate be included that clearly opposes any artificial drainage, land conversion, or development of wetlands classified by the U.S. Department of Interior through refusal of the 404 permit or through enforcement action.

Ground Water

Ground water is a valuable resource for recharging lakes and rivers as well as for providing inexpensive drinking water. Comprehensive planning for protecting both ground water and surface water has not been implemented under the Clean Water Act despite the existing statutory requirements in Section 102, 208, and 304. Because of the fragmentation of responsibility for ground water among many pieces of legislation, NALMS recommends that the Clean Water Act be amended to provide the planning and coordination mechanism for assuring that ground water uses are protected, NALMS supports amending Section 304 to authorize funding for developing regional ground water quality criteria for protecting ground water uses and to mandate State adoption of the criteria. The Act should be amended to include consideration of ground water impacts under the NPDES program and to coordinate ground water planning and protection strategies as part of an element of State water quality (recognized as both surface and ground water) management programs under Section 208. This would provide a national framework to improve performance of both Federal and State programs in a coordinated fashion.

Dams As Point Sources

A recent court decision established that discharges from dams/impoundments are subject to Section 402 NPDES requirements if they cause downstream impairment of water quality. Despite the very serious nature of these water quality problems in many sections of the Nation (not only impacting aquatic life and municipal water supplies but also suppressing economic development), some groups are petitioning Congress to amend the Act to exempt dams from Section 402 requirements. NALMS opposes this action because water quality problems downstream of dams can often be traced to upstream pollution sources that also impact lake water quality. Congress should amend Section 402 to confirm the applicability of the NPDES program to all point source discharges, including dams that cause downstream water quality problems.

Appendix--Specific Revisions To The Clean Water Act Recommended By The North American Lake Management Society

ISSUE: National Water Quality Goals (Sec. 101)

* The two national goals specified in Section 101 should be modified to reflect a more realistic timeframe for compliance and to recognize the importance of controlling toxic substances. NALMS suggests

that the "zero discharge" goal be modified to "It is the national goal that the discharge of toxic pollutants into waters of the United States be eliminated by July 1, 1987" and the "fishable, swimmable" goal be revised to reflect a new target date of July 1, 1987.

ISSUE: Research and Development (Sec. 104)

* Given the lack of resources at the State level, a national research program is needed to resolve scientific issues in lake water quality management. Section 104(h) should be amended to authorize funding (20 percent greater than 1977 funding levels) for this research and demonstration program. Among priorities would be scientifically defensible water quality criteria for toxics, trophic level criteria to combat lake eutrophication, point/nonpoint source tradeoff methodology, and cause/effect relationships between impaired water use and upstream pollution sources.

* NALMS recommends these specific changes to Section 104(h):

(1) For the purpose of developing and demonstrating new or improved methods in the management of lakes including the deleterious effects of excess nutrient addition and acid precipitation, the Administrator is authorized to enter into contracts with or make grants to public or private agencies and organizations for such purpose.

(2) The Administrator shall finance pilot programs in cooperation with State and interstate agencies, municipalities, educational institutions for the purpose of examining lake watershed management programs, including the implementation of projects which significantly reduce point and nonpoint source pollution as well as investigate the present and future effects of development and water surface use impacts.

(3) The Administrator shall finance the construction of publicly owned research facilities for such purpose.

ISSUE: Municipal Construction Grants (Sec. 201/205)

* Amend Section 201(n)(2) to allow 50 percent Federal funding for projects to correct combined sewer overflow problems that impair designated uses of lakes in water quality limited segments.

* Amend Section 205(i) to increase the amount of set-aside funding for innovative and alternative systems (important around lakes) to 7-10 percent of appropriations. By maintaining Federal share at 85 percent for these projects and reducing it to 55 percent for conventional treatment and 50 percent for sewer overflow problems, innovative and cost-effective systems will be encouraged.

* Amend Section 201 to set a deadline for an end to the Federal Construction Grants Program in 10 years. This would include "industrial cost recovery" payments for industries using POTW's for treatment that would establish State trust funds to make POTW's self sufficient. Sufficient user charges should be established to support improved operation and maintenance, (including operator training). In addition, a pretreatment program (with national minimum categorical standards) would be mandated to eliminate the public subsidy of private sector wastewater treatment.

* Repeal Section 304(d)(4) to eliminate the P.L. 97-117 definition of "secondary" treatment, but establish a variance procedure for less than "secondary" plants that discharge to the Nation's waters without water quality standards violations and use impairment. Specify that variance will be removed if standards are violated at some future date.

ISSUE: Point/Nonpoint Source Pollution Tradeoffs (Sec. 208)

Congress established Section 208 to serve as the focal point for water quality management activities (both point and nonpoint as well as surface and ground water) so that proper tradeoffs in abatement could be made to restore water quality in cost-effective manner. Unfortunately, this concept was not effectively implemented and revisions are needed to redirect the existing program and to provide an interface with other sections of the Act so that national water quality goals can be achieved.

* Establish Section 208(k) to authorize up to 15 million dollars annually for States to coordinate and undertake point/nonpoint source abatement tradeoffs. This would provide an integrated framework for water quality planning for construction grants under 205(j), wasteload allocations, and site specific standards reviews under proposed revisions to Section 303 regulations. This would also support the mechanism to coordinate and focus State ground water quality management, integrate ground water considerations among various pieces of environmental legislation, and identify Federal/State ground water protection approaches that will be implemented through State/EPA Agreements. The first year of the program would require the assembly of a document outlining in priority order watersheds with serious surface and ground water quality problems. This would be used to guide the focusing of point/nonpoint abatement tradeoffs and ground water protection/restoration strategies on priority watersheds in subsequent years and would assure consistency with priority segment standards reviews under Section 303.

* Establish Section 208(1) to authorize an amount equal to one percent of the construction grants authorization annually for grants to States (75 percent Federal, 25 percent State match) for priority watershed nonpoint source investigations. These diagnostic/feasibility studies will be used to scientifically resolve the significance of nonpoint source contributions to impaired uses and to establish abatement programs to correct the problems--including the ground work for organizing cooperative implementation projects under Section 208(m).

* Establish Section 208(m) to authorize an amount equal to one-tenth of the construction grants authorization annually to support cooperative local-State-Federal implementation projects to correct specific nonpoint source problems. 208(m)(1) will involve a reauthorization of the Rural Clean Water Program and 208(m)(2) will establish the Urban Clean Water Program--each to address nonpoint problems in their respective areas. These cooperative, interagency implementation programs will be 50 percent Federal/50 percent State and local funded and must be conducted in cooperation with State point/nonpoint abatement efforts in designated priority watersheds. State agencies, Conservation Districts, and areawide agencies would be eligible to propose and coordinate these projects with active participation by State water quality and Federal agencies. Interstate pollution problems will receive priority for funding, and funding for all three approaches will be negotiated through a mandatory State/EPA Agreement process to ensure that priority water quality problems receive attention.

ISSUE: Point Source Effluent Limitations (Sec. 301)

* Retain the current Clean Water Act approach for technology-based effluent limitations and BAT requirements for industry and secondary treatment for municipalities as effluent standards. BAT variances may be provided if bioassays and biomonitoring show no acute or chronic toxicity problems and "fishable use" is being attained. Case-by-case variances for secondary treatment may be given if water quality standards are not being violated. Section 301 should be amended to specifically appropriate funding for all BAT limitations to be developed by 1984 and to set a compliance deadline of mid-1987 for implementation.

ISSUE: Water Quality Standards (Sec. 303/304)

* Retain the current Clean Water Act approach for water quality standards serving as a backup to technology-based effluent limitations for point source controls. They are used to set effluent limitations more stringent than BAT/BCT in water quality limited segments.

* Since the scientifically defensible nature of some water quality standards has been questioned by influential groups, Section 304 should be amended to establish a five-year national research and

development program leading to implementation of defensible criteria for protecting use designations on a regional basis. Among some approaches are impounded or lake water criteria versus flowing water criteria, aquatic biological criteria, bottom sediment criteria for toxics, and criteria based on duration of exposure or probability of exceedance. The goal after five years would be to use water quality based effluent limitations once BAT, BCT, and secondary treatment are implemented.

* Amend Section 304 to authorize funding for developing regional ground water quality criteria for protecting ground water uses and to mandate State adoption of the criteria after a five-year development period.

ISSUE: Toxics and Pretreatment Standards (Sec. 307)

* NALMS supports the need for uniform pretreatment standards for different industrial categories so that taxpayers are not forced to subsidize treatment of industrial wastes and industries do not relocate to cities with less stringent pretreatment programs. NALMS recognizes the procedural problems involved with the currently proposed "removal credits system" and supports Congressional action to develop a more workable system. Surrogates or indicators for toxic pollutants should be encouraged by Congress through research and development to establish more economical monitoring procedures and screening tests to assess pretreatment effectiveness. A variance from the pretreatment requirements for toxics should be established for municipalities meeting the following three conditions: (a) No plant upsets, (b) no acute or chronic toxicity problems as demonstrated by scientifically defensible bioassay and biomonitoring methods, (c) municipal sludge is not laden with toxics from industry.

ISSUE: Clean Lakes Program (Sec. 314)

* Section 314 should be reauthorized at its present authorized level for a five-year period. EPA should be directed to encourage State assumption of this matching funds program after the five years, at which time the Federal program will sunset.

* Section 304(j), which requires EPA to issue up-to-date information on methods and procedures to restore and enhance the quality of our Nation's publically owned lakes, should also be reauthorized at one-half historic funding levels as part of the EPA effort to encourage State assumption of the program.

ISSUE: National Pollution Discharge Elimination System (Sec. 402)

* The NPDES program should be reauthorized as contained in the 1977 Act. Congress may choose to mandate certain regulations be streamlined

to simplify the review process. NALMS recognizes the historic lack of funding and short staffing for this program and maintains that refusal to fund the program properly is insufficient reason to eliminate it. EPA must retain veto authority over permits dealing with toxics and nonconventional pollutants as well as with major discharges. The five-year permit life should be retained; once BAT and BCT are installed, the permit life can be lengthened to 10 years.

* Congress should mandate that bioassays and biomonitoring be required as part of NPDES permit conditions for all dischargers of toxic substances not in compliance with BAT and POTW's without approved toxics pretreatment programs. The consideration of ground water impacts should also be incorporated into the NPDES program.

* NALMS supports the use of water pollutant discharge "bubbles" or discharge "credit and banking systems" that would be used to allow the most cost-effective approach to pollution control. NALMS recommends an amendment to Section 402 that would encourage the experimental development of such approaches on a watershed basis in concert with its recommendations on point/nonpoint source tradeoffs (Section 208).

* Section 402 should be amended to affirm the recent court decision that discharges from dams/reservoirs are subject to NPDES requirements if they cause downstream water quality problems. Some of these downstream problems are just symptoms of water quality problems in the impoundments caused by upstream pollution sources that have not yet been addressed by regulatory agencies. With dams subject to NPDES requirements, chances are better that these pollution sources will be addressed by regulatory agencies.

ISSUE: Permits for Dredged or Filled Material (Sec. 404)

* NALMS recognizes the importance of wetlands in protecting water quality and providing habitat for fish and wildlife. NALMS supports a reauthorization of this section of the Act and suggests a strong Congressional mandate be included that clearly opposes any artificial drainage, land conversion, or development of wetlands classified by the U.S. Department of Interior through refusal of the 404 permit or through enforcement action.

Oral Testimony of Jerrel D. Smith Before The
Senate Environmental Pollution Subcommittee
On Clean Water Act Revisions, July 28, 1982

INTRODUCTION

Mr. Chairman and members of the Committee, my name is Jerrel D. Smith. I am Manager of the Environmental Services Department of Union Electric Company in St. Louis, Missouri, and am here on behalf of the Edison Electric Institute (EEI) and its 189 member companies.

EEI believes the Clean Water Act can be improved significantly. Early last year, the Institute polled the environmental managers of its members to determine where the Act worked well, and where it needed refining. Based on the answers, EEI developed the proposals set forth in EEI's "Necessary Amendments to the Clean Water Act," dated March, 1982, a copy of which is submitted as an Appendix to the written testimony of EEI. It is our hope that these suggested changes will help you in your efforts to make the necessary process of protecting our environment more efficient, flexible, and fair -- without sacrificing water quality.

The Administration has forwarded to Congress a moderate and, on the whole, sensible set of proposals for amendments to the Clean Water Act. We do not agree with all of those proposals. The bill also does not address other issues that it

should. For example, EEI's written testimony encourages Congress to make the National Environmental Policy Act inapplicable to the issuance of National Pollutant Discharge Elimination System permits to new sources. Nevertheless, we concur in most of EPA's proposals, and believe they are a good starting point. The Administration should be commended for its balanced approach.

My testimony today is directed to the Administration's proposals. I will discuss the thermal variance provision, which is of great interest to EEI, and two other Administration proposals EEI supports -- ten-year NPDES permits and realistic BAT and BCT deadlines. EEI also supports the Administration's proposal to clarify that releases from dams do not require NPDES permits -- which will be the subject of special hearings tomorrow -- and certain other proposed amendments that are discussed only in the written testimony.

In two areas, EEI opposes the Administration's proposals. First, administrative imposition of civil penalties is simply unnecessary. Even if it were necessary, the failure to provide standard Administrative Procedures Act protections to alleged violators makes EPA's proposal unwise at best, and I am advised that it is possibly unconstitutional. Second, the proposed felony provision is ambiguous. It fails to state clearly that the greatly increased sanctions shall apply only to

"intentional violations of the Act occurring on a regular basis over an extended period of time that result in significant harm to the public health or the environment," as EPA has said was its intent. The Act already contains severe penalties for violations that are more than adequate. These drastic penalties should be limited carefully to cases of outrageous, reprehensible, and harmful conduct.

THERMAL DISCHARGE DECISIONS SHOULD BE STREAMLINED

Generating electricity from fossil or nuclear fuels requires large amounts of water for cooling purposes. When the Federal Water Pollution Control Act was first passed, Congress was concerned about the environmental effect of discharging this heated water. It classified heat as a "pollutant" and required NPDES permits for its discharge. As a result, the Act's "technology-based" controls apply to heat, and require installation of "best available technology" (BAT) control measures for reducing heated discharges.

The standard off-stream system required to remove heat from cooling water is the evaporative cooling tower. Cooling towers have three negative characteristics. First, they are very expensive, costing between 30 and 75 million dollars -- including burning of an additional 50,000 tons of coal each year -- for a single 1000 MW generating unit. Second, they

evaporate large quantities of water to dissipate heat to the atmosphere, consuming up to 250 percent more water than open-cycle cooling. This is particularly important in the more arid parts of the nation. Third, they may sometimes cause adverse side effects that must be considered in plant design. These potentially include ground level fogging, icing of nearby exposed surfaces in winter, cloud formation, salt drift from plants using ocean cooling water, and aesthetic impact. Though cooling towers may be acceptable in some circumstances, these three negative traits often make them an unattractive alternative.

Heat is not like other pollutants. Heat can alter the aquatic habitat, sometimes in beneficial ways, but it dissipates rapidly to the atmosphere. It is not a toxic substance, and does not react chemically with substances, plants, or animals. Recognizing the unique nature of heat, and that cooling towers should not be required where they are not needed, Congress provided in the Act for thermal variances from the outset, based upon biological studies.

Since 1972, over one hundred and fifty such studies have been done at existing power stations. The studies performed prior to 1978 cost over $30 million, and although no figures are available for expenditures since that date, the total now is substantially greater. Ten years of these intensive

scientific investigations now show that the environmental effects from discharges of heated water are usually small and localized, and therefore variances for existing sources are usually granted.

These studies and investigations are summarized in a ten-volume set of reports submitted to EPA in June 1978 on behalf of EEI and others. Since that time, additional studies at other sites have confirmed the earlier findings. Given these facts, EPA and the various state NPDES agencies have approved or conditionally approved 162 demonstrations under § 316(a), while rejecting only 4 due to "insufficient information."

New sources are not likely to seek variances, since cooling system design must be decided very early in their construction schedules. Even when managements believe there will be no significant environmental harm due to a thermal discharge, they may be unable to delay construction long enough to conduct the detailed biological studies required by § 316(a), to pursue a variance through the labrinth of administrative procedures at both state and federal levels, and to obtain a decision under the uncertain and subjective test provided in the Act.

It is now documented that discharges of heated water simply are not the critical environmental problem feared ten

years ago. Yet heat is still classified as a pollutant in the Act. Expensive cooling towers are still presumptively required, frequently to the exclusion of other more sensible heat dispersion techniques like diffuser pipes, cooling ponds and lakes, and careful siting of new open-cycle plants. Millions must still be spent on complex, individual biological proofs that almost always reach the conclusion of no significant harm to the aquatic environment.

Full-length biological "demonstrations" should be required for a variance only when there is a reasonable possibility that a thermal discharge might cause significant environmental harm. Thermal water quality standards to protect fish and wildlife were set under EPA supervision, and must be reviewed by the states at least every three years. Thermal discharges are not likely to cause any significant environmental harm if they comply with water quality standards. The standards are a convenient, simple, relatively objective basis for determining, as a first cut, whether thermal discharges should be permitted. The Act should be amended to allow thermal variances when a state's water quality standards are satisfied.

When such standards would be exceeded, permittees that wish to perform biological studies should be allowed to do so to obtain a variance. As the Administration proposes, however,

they should not have to show the continued presence of exactly the same "indigenous" population of aquatic organisms as would have resided in the area in the absence of a thermal discharge. Rather, a satisfactory demonstration should be based on maintenance of a "balanced population." Some species will avoid, and others will be attracted, to the warmer water. If Congress is unwilling to allow cost considerations to enter into § 316(a) decisions, it should at least clarify that subtle, non-persistent effects such as these are not the sort of significant adverse environmental impact that should automatically require the expenditure of society's limited resources on expensive, multi-million dollar cooling towers.

Congress now has the information it needs to streamline thermal decisionmaking. It can provide a much more efficient procedure for deciding whether various types of control technology -- particularly cooling towers -- should be required.

NPDES PERMITS SHOULD LAST FOR AT LEAST 10 YEARS

The Clean Water Act has been in effect for ten years. The five-year NPDES permits issued in the first round of permitting now are expiring, and a second round of permits is being issued. First-round permits required sources to meet effluent limitations based on the "best practicable" control

technology, and generally more-stringent BAT requirements will be imposed in second-round permits. There are approximately 44,690 NPDES permits outstanding, and processing a single permit can take years -- especially when contests or controversy arise -- and tens of thousands of dollars. In some circumstances, second-round permits now are being issued to dischargers whose first-round permits still are unresolved.

Both regulators and the regulated need greater finality and certainty. After second-round permits impose BAT and BCT requirements, no further stages of technology-based limitations will remain. The time has come to extend the permit term to at least ten years, as the House Subcommittee on Oversight and Review has recommended. This would save everyone a great deal of time and resources that could better be devoted to other pressing environmental problems. Permits should last for at least ten years as the Administration has proposed.

Some have argued that extending permit terms to ten years amounts to "no further progress for a decade." These arguments are simply red herrings. EPA currently uses "reopener clauses" to provide for incorporation of more-stringent technology-based limitations in the future, and certainly could do so in 10 year permits. In addition, EPA regulations specifically provide that issuance of new regulations may justify a permit modification. Cost-saving innovations will be adopted by

industry for obvious reasons without new permits requiring it. Issued permits currently may be revised whenever new information indicates different permit conditions should have been imposed. Finally, even the stringent protections afforded by the NPDES program may be increased by the states pursuant to CWA § 510 under state law.

We urge Congress to extend NPDES permit terms.

CONGRESS SHOULD EXTEND THE BCT AND BAT COMPLIANCE DATES

The Act currently requires compliance with BCT and BAT limitations in most cases by July 1, 1984. EPA has acknowledged that at least three years lead time generally is required for compliance after BAT standards are set. Unfortunately, EPA has not set BAT standards for many industries, those BCT standards that have been set have been vacated, and few (if any) permits informing sources of their BAT limitations have been issued.

To provide for orderly and efficient transition to BAT level controls, the Subcommittee on Oversight and Review of the House Committee on Public Works and Transportation recommended that Congress extend the BAT compliance date to July 1, 1987. EPA has proposed extending it to July 1, 1988. The Edison Electric Institute supports these recommendations, and urges that the BCT compliance date be extended for the same reasons.

However, compliance should be extended until three years after EPA promulgates applicable regulations, rather than to an arbitrary date. EPA often has found it impossible to promulgate complex regulations by fixed statutory deadlines, resulting in unnecessary litigation and the need for further legislative action. To avoid this in implementing BCT and BAT, compliance should be required within three years following adoption of implementing regulations by EPA.

CONCLUSION

I would like to thank the Committee for this opportunity to present these views, based on the experience of the electric utilities with the Clean Water Act. Although my comments have been fairly general, EEI's written testimony is more detailed and may be of interest to the Committee and its staff. I would be pleased to answer any questions you might have, or to respond to questions of your staff at a later time.

TESTIMONY OF THE
AMERICAN CONSULTING ENGINEERS COUNCIL

ON

AMENDMENTS TO THE FEDERAL WATER POLLUTION CONTROL ACT

BEFORE THE
SUBCOMMITTEE ON
WATER RESOURCES
OF THE
COMMITTEE ON
PUBLIC WORKS AND TRANSPORTATION

UNITED STATES HOUSE OF REPRESENTATIVES

Washington, D.C.
July 29, 1982

Mr. Chairman and members of the Subcommittee on Water Resources, my name is Randolph Goulding of Jordan, Jones and Goulding, Inc. of Atlanta, Georgia and I appear today on behalf of the American Consulting Engineers Council (ACEC). The Council is pleased to have this opportunity to present this statement and provide the Subcommittee with its views and comments on the Administration's proposal to reauthorize and amend the Clean Water Act. In general we support the Administration's proposals with a few exceptions. We want to state at the outset we oppose a simple multi-year extension without reform. If Congress is not prepared to reform the law as it did the construction grant program last year, we urge you to pass a one-year extension with a comprehensive bill next year.

ACEC's membership includes more than 3,800 private engineering firms which perform design and construction services for all levels of government and private industry and governmental entities at all levels throughout the world. Although ACEC's member firms perform every conceivable engineering discipline, one of the most active is the design and construction management of wastewater treatment systems for industry and municipalities. More than 1,000 of our member firms are actively engaged in this practice. We therefore have had much direct experience in how the Clean Water Act operates and substantial experience with how well the EPA regulations and guidelines work to implement the act. We believe much of what the agency has proposed will make the law more effective and easier both to enforce and achieve clean water objectives.

ACEC has actively participated in the legislative and oversight process of wastewater treatment since Congress first established the

federal role in the wastewater field in the 50s and 60s. We have testified and worked with Congressional committees and staff during the hearings for the original act in 1972, as well as the major amendments in 1977 and reform of the construction grants program in 1981.

We have also worked actively with EPA on advisory groups, regulatory review task forces and informal guidance panels to assist the agency in making the implementation mechanisms under the act work better. On occasion we have challenged the agency directly where we believed its regulations impeded progress toward achieving of clean water goals.

We offer the following general observations and specific comments from our 10-year perspective on the Clean Water Act and our work with Congress and EPA. We believe our experience on behalf of state, local and federal clients as well as private sector industrial, agricultural and commercial interests provide us with broad insight into the ways the act has succeeded and where it no longer responds to the realities of 1982.

1. Knowledge of treatment technology and its impact on aquatic systems and protection of public health has grown exponentially.

Such knowledge and the resulting capability to use it has spread throughout all sectors of the wastewater industry. One result of this greater knowledge has been more efficient and effective wastewater treatment system designs. More importantly, we now have a much better understanding of the complex relationships between contaminants and the resulting water quality. We know a great deal more about the

capabilities and limitations of various technologies to remove or neutralize both toxic and conventional contaminants.

2. The unprecedented inflation in the costs of construction, energy, chemicals, labor and other cost elements mean that wastewater treatment, particularly in industry, must not be judged on the basis of cost effectiveness alone but on how integrated such treatment is with the improved efficiency and productivity of manufacturing and other industrial processes. Federal resources to help finance the costs of municipal systems have also been reduced by necessary budget cuts.

These factors make the Congressionally mandated Clean Water Act criterion of "economically achievable" more significant when developing treatment standards for both municipal and industrial systems. Wastewater systems must not only be technologically feasible but also operable and economically efficient throughout their design life. Compliance is a direct function of efficient performance.

3. Municipalities and industry increasingly need certainty and predictablity in federal and state standards. Regulatory policies and guidelines must also be drafted to encourage development of operable and manageable systems. Such a regulatory posture creates incentives for compliance and makes enforcement of the law easier.

EPA must revise its role from one of direct control to motivating of state and local governments to implement credible standards. The

federal/state regulatory partnership must be based on mutual respect for the capabilities of each partner and acceptance by each of their respective functions in the regulatory process. The partnership should not merely create schedules duplicating review levels. Standards and the permits that define them must be of sufficient duration to permit well-managed and planned compliance.

4. The law must be simplified to encourage compliance, not reward foot dragging, as has apparently occurred in the past. This requires a tough but fair enforcement policy and a necessity to lead by example.

Progress in meeting the Clean Water Act's goals, as presented in the Administration's statement, has been substantial. Further progress depends on good management.

As our understanding about the technology of wastewater treatment has increased, the institutional responsibility for implementation has shifted from EPA to state and local governments and the private sector. The management system and standards process spelled out in the law must keep current with this shift. We believe this is the general intent of the Administration's proposals and we generally support that intent. However, we do not agree with all the particulars.

We offer the following specific comments on the major sections of the proposed amendments.

Best Available Treatment (Section 2)

Much of the confusion over BAT/BCT implementation derives from a misunderstanding of what is involved in developing the BAT standards. Congress required EPA to balance technology, based on effluent

standards and reduced quantities of toxics entering the nation's waters, with the economic impact on specific industries and actual water quality improvement. We believe Congress and EPA seriously underestimated what was involved in developing BAT industry standards. The limited knowledge of actual stream impact resulting from toxic discharges and the diversity of industrial processes in different parts of the country made development of single industry standards for priority pollutants even more difficult, if not impossible. Consulting engineers working with industry scientists saw very early that translating technology based standards into reliable, operable and efficient wastewater treatment systems would be very difficult.

Whatever the fault or misjudgment during the first five years of the program, toxic removal systems cannot be designed without reasonable standards. However, ACEC agrees with EPA and industry that a much greater degree of toxic removal is apparently achieved with so called conventional chemical/biological treatment. Nonetheless, ACEC does not believe the integrity of the law should be compromised. The agency must have more time to complete standards which are reasonable and technically adequate. By the same token industry must have a reasonable period to design and construct or otherwise demonstrate alternative compliance methods to meet the standards.

How this conclusion should be translated into law creates some disagreement. The consent decree and the 1977 amendments to the act defined two target dates, the date EPA was to complete the standards and the date of compliance by industry. The accomplishment of the latter depends on the former and the agency will not complete all standards at

once. In fact, EPA has published a schedule as part of the consent decree which indicates the last rules will not be complete until 1984, Therefore, we think the quality of design and application of rules to specific industry sites, processes and locations will be improved by giving industry a specific time period to comply after final rules are published, say within three years, rather than by mandating a BAT compliance date of 1988.

We believe this will be legislatively fair and establish an incentive to encourage compliance. It will also permit industry scientists and their consulting engineers to begin planning the systems needed for the level of toxic removals consistent with capital investment schedules and plant upgrading timetables.

Pretreatment (Section 7)

Closely related to the issue of BAT compliance is industrial pretreatment for so-called "indirect dischargers" into municipal sewage treatment plants. ACEC agrees that developing categorical standards is a very difficult task. Our experience shows that the value of categorical standards may be very limited and difficult to apply to a specific system where many different small industries are discharging wastes to the same treatment plant. The interaction of toxic and conventional pollutants in a treatment plant is very difficult to predict. Since the system must be modified and balanced to suit local conditions whether or not categorical standards are in effect, we believe municipal certification to create a local system that meets local needs will work best to meet discharge standards.

Nonetheless, we also believe Congress should set a realistic date for developing categorical standards and these standards should apply

where it has been shown to be necessary for specific industries. Where unnecessary, or where adequate capability exists to develop a local pretreatment program, the most workable solution is municipal certification as proposed by the Administration.

Municipal Secondary Treatment Deadline (Section 3)

We agree with the Administration that last year's extension of secondary treatment compliance for those municipalities which applied for extension under the 1977 amendments requires further amendment to allow all municipalities the opportunity to apply for an extension. However, this should not be a license for further delay and foot dragging. Aggressive enforcement to move cities that have been reluctant to continue the compliance process must accompany the extended schedule.

Last year's amendments require EPA to redefine secondary treatment to allow cities to take advantage of simpler technology, such as lagoons and trickling filters, to meet the secondary standard. Smaller communities can utilize these less costly systems and thereby achieve compliance more quickly. However, the reduction of the construction grants authorization and a major rescission have reduced available federal funds to municipalties by more than three billion dollars. This has stretched out state plans for funding priority projects at least several years. The delay in approving of the FY'82 construction grants funding until July 19, 1982 further contributed to this uncertainty. These two factors, secondary treatment redefinition and stretched out funding priorities, both support the requested compliance extension.

Federal Facilities (Section 10)

ACEC opposes exempting federal facilties from compliance with federal law. Federal facilities, military or civilian, should be held to the same schedule as municipal and industrial waste dischargers. ACEC believes that federal agencies should lead by example and be required to comply in advance of municipal and industrial deadlines. Many of the hazardous waste disposal clean-up problems now under examination under the Resource Conservation and Recovery Act and "Superfund" Law are traceable to federal activity in defense-related projects such as munitions, herbicides and pesticides. This is particularly true of government-owned facilities operated under license by private contractors. The same standards that private industry must meet should apply to government-owned industrial sites.

Civil and Criminal Penalties (Section 8 and 9)

ACEC opposes expanding sanctions to include administrative penalties. We do not believe that EPA or the Justice Department have demonstrated the need for nonjudicial remedies either by caseload or class of violation. Furthermore expanding penalties to include the possibility of "knowing" violations as felonies is of concern to consulting engineers since it creates a disincentive for industry or others to reveal all the facts about their discharges when developing a municipal system's pretreatment or even basic design. The addition of felony sanctions will discourage both problemsolving or early notification of serious toxic discharges. Felony sanctions should be reserved for willful violations of the law.

Other provisions

Permits (Section 12)

ACEC supports extending the term of National Pollution Discharge Elimination System (NPDES) permits to 10 years. Planning, design and construction of municipal wastewater treatment facilities during the first 10 years of the law has averaged 7 to 10 years. Industrial projects often require 3 to 5 years. Many projects which achieve compliance within the permit period have a limited track record of operation and inadequate evidence of water quality impact before the five-year permit expires. A 10-year permit would provide a realistic period to verify whether stream segments are actually being cleaned up before permit limitations are reconsidered.

Dams (Section 14)

ACEC supports the amendment to redefine dam discharges as non-point sources. No level of government has the resources to regulate the hundreds of thousands of dams in this country. ACEC does not believe that any water quality benefit would result from requiring permits for releases from impoundments.

Dredge and Fill (Section 404 - Clean Water Act)

ACEC members have experienced great frustration and their clients have experienced excessive and unnecessary cost increases due to excessive interpretation of wetlands and waters subject to permits under Section 404. ACEC urges that the U.S. Corps of Engineers resonsibility to issue permits be limited to navigable waters and wetlands adjacent to such waters. Regulation of other wetlands should be delegated to the states as part of their water quality program.

We appreciate the opportunity to make our views known to the subcommittee on this important legislation.

Thank you.

American Fisheries Society
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JOHN J. MAGNUSON
PRESIDENT 1981-1982

CARL R. SULLIVAN
EXECUTIVE DIRECTOR

ROBERT L. KENDALL
EDITOR

July 28, 198

Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Senate Environment and Public Works Committee
Room 4200, DSOB
Washington, D.C. 20510

Dear Senator Chafee:

The American Fisheries Society (AFS) wishes to file these comments in the record of the hearing held by your Subcommittee concerning proposed amendments to the Clean Water Act.

These comments are directed primarily at the need for effective regulation of discharges from impoundments which in some cases result in damage or destruction of fishery resources through degradation of water quality. The Society is filing comments jointly with other conservation organizations on other aspects of proposed amendments to the Clean Water Act.

First let me establish the basis for the AFS to address this subject. AFS was organized in 1870 and is the oldest and largest professional fisheries organization in the world. Members are fisheries scientists, limnologists, aquatic ecologists, engineers, and specialists of other disciplines concerned with management of, and research on, living aquatic resources. AFS is an affiliate member of the American Association for the Advancement of Science, and an adherent society of the American Institute of Biological Sciences, is represented in the National Research Council of the U.S. National Academy of Sciences, and is a member of the Natural Resources Council of America and the Renewable Natural Resources Foundation.

The Society promotes the scientific management of aquatic resources for the optimum use and enjoyment by the people of this continent. This includes both sport and commercial fisheries in fresh and marine waters and involves achieving the best possible quality of aquatic environment while at the same time meeting other absolutely essential requirements of society.

It is the policy of the Society to encourage cooperation among all water development and regulatory agencies of the State and Federal governments in order to assure the consideration of living aquatic resources in Federally financed or regulated water development projects and permit programs. In this connection AFS has occasionally taken positions on public policy matters involving fish and aquatic life resources and their habitats. In keeping with the scientific orientation of our membership, these positions are taken infrequently and only after careful and conservative analysis of the public question at issue.

5410 GROSVENOR LANE • BETHESDA, MARYLAND 20814-2199 • (301) 897-8616
OFFICE OF AFS EDITOR • P.O. BOX 1150, COLUMBIA, MARYLAND 21044 • (301) 596-3458

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The American Fisheries Society believes that the protection and perpetuation of balanced aquatic communities in all public waters is of the utmost importance because of the contribution of these resources to the quality of human life through food supply, recreation, and maintenance of a healthy environment. In addition, the economic value of the commercial and recreational fishing industries in the U.S. is now estimated to be about $23 billion per year. This is a significant segment of American industry, providing employment to thousands of Americans engaged directly in the fishing industries or in the numerous related supporting industries.

The American Fisheries Society supported the Congress in the passage of Public Law 92-500, the Clean Water Act, in which was established the intent that all waters should be fishable and swimmable by 1983.

This letter does not address the question of the many effects upon fish or their habitats, of dams, wiers, water diversions, pumping stations, impoundments, or other man-made structures. It does however, relate to the sometimes adverse impacts of impoundments on water quality as required for aquatic life in public waters. Downstream discharges from impoundments, whether for power generation, navigation, irrigation, industrial or municipal supply and other uses, or discharges resulting from normal spillage or leakage can lead to substantial degradation of water quality, thereby impairing its suitablity as habitat for aquatic life indigeneous to the water body in question. These degradations most commonly result from one or more of the following factors: de-oxygenation, siltation, and/or turbidity, super saturation with atmospheric gases, temperature changes or fluctuations, accumulations of toxic metals or other pollutants, or fluctuations of pH.

In many cases such adverse impacts on water quality can be prevented or minimized only through modifications of the physical facilities at the point of discharge, or the operation of these facilities, or by changes in the schedule of releases.

The American Fisheries Society recognizes that most releases from impoundments do not have adverse impacts on water quality and indeed, many such releases may improve water quality or other habitat factors for aquatic life. However, there are many impoundments which do cause degradations of water quality at various times by virtue of the design and/or operation of the dam or other facilities of the impoundments. Therefore, the AFS advocates the regulation of discharges into public waters from impoundments of such public waters, both existing and those yet to be constructed and which may have adverse impacts on water quality or aquatic life.

The American Fisheries Society believes that the Clean Water Act requires the control of the degradation of water quality in public waters as a result of the construction and operation of dams, wiers, or other facilities which create man-made impoundments. The American Fisheries Society also believes the Congress was clear in its intent that all waters should be fishable and swimmable, and the Society advocates enactment of an effective regulatory structure to correct and prevent unacceptable degradation of these waters and the public's fisheries resources which are dependent on this habitat.

Sincerely,

Carl R. Sullivan
Executive Director

cc: Dr. John Magnuson, AFS President
AFS Officers

Statement
of
AMERICAN PUBLIC POWER ASSOCIATION
on
REAUTHORIZATION OF THE CLEAN WATER ACT

August 11, 1982

As the Congress deliberates reauthorization of the Federal Water Pollution Control Act ("Clean Water Act"), the American Public Power Association ("APPA") urges Congressional resolution of certain key problems affecting the operations of local publicly owned electric utilities. APPA is the national service organization representing over 1,750 local publicly owned electric utilities in the United States, Puerto Rico, Guam, American Samoa, and the Virgin Islands.

In particular, APPA believes that satisfactory solutions must be found for two issues. First, APPA is very concerned with the question of whether hydroelectric dams should be treated as point sources of pollution requiring NPDES permits. To the contrary, the Association believes that hydro dams should be treated as nonpoint sources. Second, certain APPA members have suggested that thermal discharge standards should be modified to permit once-through cooling where it will not cause adverse environmental consequences.

I. Hydro Dams as Point Sources of Pollution

APPA members in the past have relied on and are today making greater use of hydroelectric facilities to meet their electric generation needs. This fact is reflected in these statistics:

a. As of December 31, 1981, there were 145 municipally owned hydroelectric plants with a total capacity of 4,868,100 kilowatts.

b. As of March 31, 1981, the latest date for which statistics are available, there were 125 license applications for new hydroelectric capacity pending at the Federal Energy Regulatory Commission ("FERC"), of which 33 were from municipalities. Of the 343 preliminary permits in effect on that date, 119 were for municipalities, and an additional 105 preliminary permit applications from municipalities were pending.

c. In 1980, 29 percent of installed municipal generating capacity was hydroelectric.

The commitment of publicly owned utilities to using hydroelectric generation is clearly consistent with national policies encouraging use of our own renewable resources to meet our energy needs.

Given this commitment, the recent federal court decision, National Wildlife Federation v. Gorsuch, holding that hydro dams are point sources of pollution, has been viewed with great concern by APPA members. APPA believes the decision misinterprets the Clean Water Act because Congress intended for dams to be treated as nonpoint sources. The Association feels there is no reason to change this policy because:

a. Dams do not cause significant water quality problems.

b. In those rare instances where problems arise, they are site specific.

c. Extensive environmental review procedures have already been established to correct any such problems.

d. Diversion of Environmental Protection Agency ("EPA") resources to implement a NPDES permit program for dams would constitute "administrative overkill."

As the attached resolution indicates, APPA strongly recommends that the Act be amended so that hydro dams are explicitly removed from any statutory definition that may require such dams to be treated as point sources of pollution.

A. Dams Do Not Cause Significant Water Quality Problems

Admittedly, dams cause changes in water quality. Much of these changes are induced through a natural process known as thermal stratification. Unlike point sources, however, dams do not add pollutants or other substances to the water.

The real issue, however, is whether these changes are so serious or so prevalent that they rise to a level requiring extensive EPA regulation. The National Wildlife Federation ("NWF") says there are probably 1,000 to 1,500 "problem dams" that may require permits, out of a total of approximately 2.3 million dams. The NWF also describes the damage that such dams may cause to fish and other aquatic life. However, NWF cannot provide specific evidence showing that this is a widespread problem, except to say that "(t)he total damage to downstream water quality and the value of the downstream fishery of these dam discharges is unknown, but is significant." Without such corrobative evidence, there is no justification for undertaking a major administrative program such as that required by the NPDES permitting system.

B. Where Dams Cause Water Quality Problems, They Are Site Specific

The water quality changes caused by dams vary depending on a number of factors. One important variable is location. Another is the purpose for which the dam was constructed -- power generation, flood control, or irrigation. Other factors that affect water quality are local climate, the hydrodynamics of the reservoir, the use of the surrounding stream, and stream flows. Accordingly, when problems do arise, they are caused by conditions peculiar to an individual site.

In turn, these problems can only be resolved by adapting appropriate technologies to the conditions surrounding a given dam.

The NPDES program, however, cannot accomodate such individual needs. The program is premised on setting uniform effluent limitations through technological controls, regardless of their adaptability to a particular site and its water quality problems. Simply put, the NPDES program is too inflexible to remedy any water quality problems caused by dams.

C. Extensive Environmental Review Procedures Already Exist to Correct the Water Quality Effects of Dams

A number of regulatory programs exist to mitigate or correct water quality problems that may be created by the construction or operation of dams.

In the case of hydroelectric dams, FERC must issue licenses for the construction, operation, and maintenance of such dams. As part of the licensing process, extensive environmental information must be provided by applicants. The report "must discuss water quality and flows and contain baseline data sufficient to determine the normal and seasonal variability, the impacts expected during construction and operation, and any mitigative, enhancement, and protective measures proposed by the applicant." 18 C.F.R. Sec. 4.41(f) (emphasis added).

Once a license is issued, FERC continues to oversee the water quality impacts of dams. In fact, a standard condition in the issuance of licenses for unconstructed major projects states that the licensee must take "reasonable measures to prevent...any form of water...pollution. The Commission, upon request or its own motion, may order the Licensee to take such measures as the Commission finds

to be necessary...."

The Clean Water Act itself provides several avenues for reviewing water quality impacts by dams. Section 404 requires the Army Corps of Engineers to issue permits for the discharge of dredged or fill material into navigable water, including construction of new dams. Also, as noted above, FERC must license any hydroelectric facility. In both instances, section 401 requires states to certify that a proposed project will comply with applicable water quality standards. Thus, states play a critical role in assessing whether dams will create any adverse water quality impacts.

In addition, states must develop Areawide Waste Treatment Management Plans under Section 208. The purpose of such plans is to address water quality problems caused by nonpoint sources, including those created by dams. Further, EPA is required under Section 304(f) to prepare

> (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and
>
> (2) processes, procedures, and methods to control pollution resulting from --
>
> (F) changes in the movement, flow, or circulation of any navigable waters ...including changes caused by the construction of dams.... (emphasis added)

Since 1973, EPA has issued several reports discussing water quality impacts of dams and describing best management practices available to control these impacts.

Although the Act places primary authority for regulating water quality with the states, APPA believes Congress should examine whether

EPA should regulate water quality discharges from federal dams. In many instances, such as the dams operated by the Tennessee Valley Authority or the Bonneville Power Administration, there is one coordinated system designed to provide one or more services. These dams are often linked across more than one state boundary. Thus, a strong possibility exists that federal dams may be subject to inconsistent, costly state regulation and thereby be prevented from meeting their regional service obligations. EPA regulation of such dams would ensure that federal dams are regulated in a manner consistent with these functions and the requirements of the Clean Water Act. We urge the Committee to examine this question, and modify the Act if appropriate.

D. Diversion of EPA Resources to Implement a NPDES Program Would Constitute "Administrative Overkill"

The states have used the authority conferred by the Act to adopt extensive water quality standards. All states have standards addressing water quality problems caused by dams, including dissolved oxygen, dissolved minerals, and turbidity. States also have established enforcement procedures to ensure compliance with such standards. Where violations occur, prompt, effective steps are being taken to correct problems.

Through these enforcement programs, and the initiative of dam operators, water quality problems caused by dams are being corrected. The Corps of Engineers has resolved or is trying to correct problems caused by certain dams in Missouri. NWF itself has acknowledged several instances where the Tennessee Valley Authority has implemented various technologies to correct low dissolved oxygen problems caused

by its dams. The Federation also indicates that the Bonneville Power Administration has taken measures to resolve water problems surrounding its dams. In each instance, these measures were taken without the need for a NPDES program.

Given this and EPA's limited resources to address water quality problems, there is no reason why a NPDES permit program should be instituted. The administrative and financial resources that would be needed to develop such a program for dams would be overwhelming. The Administrator would have to evaluate the water quality effects of 2.3 million dams, even under the NWF's proposed categorization of dams. It will take an extensive amount of time and personnel to identify "problem dams" and devise corrective measures. In the vast majority of cases, probably no corrective measures will be needed. In other cases, it may duplicate work already being done by others. Since effective regulatory mechanisms are already in place to address water quality impacts of dams, the Congress should reaffirm its intent to treat hydro dams as nonpoint sources of pollution.

II. Thermal Discharges

Two APPA members, the Los Angeles, California, Department of Water and Power, and the Jacksonville, Florida, Electric Authority believe that discharges of heated water are not causing water quality problems as once feared. Nevertheless, EPA regulations restrict such discharges by requiring closed-cycle cooling unless an exemption is granted. According to both municipal utilities, closed-cycle cooling is extremely expensive and requires significant use of limited water resources. Thus, both recommend that the Act be amended to permit once-through cooling where it can be demonstrated that no adverse

water quality impacts will result. Copies of statements in support of their position will be sent to the Committee once they have been formally approved by the appropriate governing boards of these two public power systems.

III. Conclusion

APPA respectfully requests the Congress to give careful consideration to its views on these issues. The Association is particularly concerned that the hydro dam issue be resolved because of a pending court order that would require the EPA Administrator to institute a NPDES permit program for dams. Although this order has been stayed pending the outcome of an appeal, the possibility exists that EPA will have to engage in this unnecessary, costly regulatory exercise if no action is forthcoming from the Congress.

RESOLUTION
ON
HYDRO DAMS AS POINT SOURCES OF POLLUTION

WHEREAS, the Federal Water Pollution Control Act ("Clean Water Act") regulates discharges of pollutants into navigable waters, and

WHEREAS, the United States Court of Appeals for the Eighth Circuit and the United States District Court for the District of South Carolina have ruled that hydro dams are not point sources of pollution within the meaning of the Act; however, a judge for the U.S. District Court for the District of Columbia has issued a contrary ruling, holding that dams are point sources that discharge pollutants and, therefore, must be regulated by the Environmental Protection Agency (EPA), and

WHEREAS, in the District of Columbia case, EPA has been ordered to promulgate regulations within 90 days to comply with this decision, which ruling has been stayed pending an appeal by EPA, and

WHEREAS, if this decision is upheld, it would require substantial, costly modifications of existing dams to comply with the Clean Water Act, as well as increase the costs of and time required to construct new dam projects, and

WHEREAS, S. 2280 has been introduced to make it clear that changes in water quality caused by dams are not within the definition of a "discharge of a pollutant" within the Act;

NOW, THEREFORE, BE IT RESOLVED: that the American Public Power Association urges the Congress to explicitly provide that hydro dams are not point sources of pollution within the meaning of the Clean Water Act.

-- Adopted by the American Public Power Association on May 25 at the 1982 Annual Conference held in New Orleans, Louisiana

The American Society of Mechanical Engineers
2029 K Street, N.W., Washington, D.C. 20006/(202) 875-3756

STATEMENT ON THE CLEAN WATER ACT

BY THE

ENVIRONMENTAL AFFAIRS COMMITTEE

OF THE

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

EFFLUENT LIMITATIONS

The establishment of effluent standards for the industries contributing the largest amount of pollutants to our nations streams and enforcement of PL92-500 and PL95-12 has resulted in almost all industry with direct discharges to the streams having reduced their discharge of pollutants to practical minimums. The largest pollutors of our streams today are the municipal discharges operated by Publicly Owned Treatment Works (POTW's) which have not constructed facilities to adequately treat their wastewater. The arbitrary adoption of discharge parameters without consideration of stream self purification capabilities for conventional pollutants has resulted in the expenditure of unnecessary federal and local funds, as well as the design and construction of facilities too sophisticated to be operated by most public agencies.

Therefore, the Committee believes the Clean Water Act should be amended to place more consideration on local water quality and stream self-cleansing capabilities. All streams have been classified as to usage under previous provisions of PL92-500. These classifications were designated by the States and approved by the EPA and indicate the highest practical classifications which can be achieved. The information is now available to enable legislation to authorize a return to stream standards for conventional pollutants. Using this information the Administrator of the EPA should promulgate base standards for conventional pollutants for each stretch of the streams of the U.S. which are receiving discharge of industrial or municipal wastewater. In setting these standards the Administrator should recognize that due to differences in geological, topographical, a climatic conditions, the same standards cannot be met in all parts of the U.S.

The return to stream standards, properly developed and enforced, taking cognizance of local natural conditions will result in reduction of expenditure and better plant operation without the degradation or misuse of our streams. While the Committee agrees that existing effluent standards should remain intact, new, more rigid standards should only be required when warranted by local water quality conditions. Across-the-board requirements for BAT regardless of water quality is a huge waste of financial resources. New conventional pollutants can still be controlled through the NPDES system.

The Act should be amended to allow for greater use of the "innovative" classification which permits extension of the compliance dates. If a facility subject to permit under section 402 of the Act proposes to comply with the requirements of section 301 by replacing existing production capacity with:

A. An innovative production process which will result in effluent reduction significantly greater than that required to meet the stream standards and move toward the national goal of minimizing the discharge of all pollutants;

B. With the installation of an innovative control technique that has been demonstrated on a small scale and has been held by peer review to have a substantial likelihood for achieving a significantly greater effluent reduction than required;

C. By achieving the required reduction with an innovative system that has a potential for significantly lower costs than systems commonly in use and has the potential for industry-wide application;

then that facility should be granted an extended compliance date to July 1, 1987. This should only be allowed, however, if actual experimental data is developed and/or the process has the potential for industry-wide application as determined by peer review.

WATER RELATED EFFLUENT LIMITATIONS

Section 302 will no longer be necessary if the Act is amended to return to stream standards. The only effluent limitations remaining in effect would be those which pertain to toxic substances, industries which were the major pollutors and for which effluent guidelines have been established. The Committee believes these should not be waived or decreased.

Every effort and technology available should be utilized to minimize the discharge of toxic pollutants into waterways. After EPA promulgates BAT for a particular toxic pollutant, dischargers of the pollutant should have three years to develop the appropriate technology and build the necessary facilities to comply.

WATER QUALITY STANDARDS AND IMPLEMENTATION PLANS

The Adminstrator should establish a schedule whereby each State shall review the water quality standards of the waters in that State and submit the results to the Administrator once every three years. The Administrator shall then consider the recommendations of these reviews and, if necessary, promulgate new stream standards.

This process will allow each State to review its waters and request changes in their standards without undue delay. This should anticipate needed changes in standards. In cases of emergency (danger to public health and/or public water supplies) the State and the Administrator have the opportunity to make standards more stringent.

The term "no discharge" should be replaced with the term "standard of performance". "No discharge" has proven to be impractical in all cases except where extremely hazardous substances are involved. The term "standard of performance" would be defined as the standard for control of the discharge of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives.

This statement was prepared by the Environmental Affairs Committee of the American Society of Mechanical Engineers (ASME). It represents the considered judgement of this Committee, a group of experts in this field, rather than an official position of ASME.

Statement of
American Textile Manufacturers Institute
Before the
Senate Environment and Public Works
Subcommittee on Environmental Pollution
July 29, 1982

Mr. Chairman, we appreciate the opportunity to submit a statement for the printed record of hearings on the reauthorization of the Clean Water Act.

The American Textile Manufacturers Institute (ATMI) is the central trade association of the American textile industry, representing about 85 percent of the domestic industry for the spinning, weaving, knitting and finishing of wool, cotton, silk and man-made fibers. ATMI provides governmental, economic, international trade, occupational safety and health, statistical, public relations and other services to the industry.

The American textile industry represents a major industrial segment of the nation's economy, approximately one million employees, including 47 percent women and 17 percent minorities.

The textile industry, like so many other American industries, supports our nation's Clean Water goals. The industry has been in compliance with the Best Practicable Technology regulations established by the Environmental Protection Agency in 1974. While we believe the Act, as presently written, needs some modifications, including greater flexibility in local pretreatment programs and longer NPDES permit terms, we feel a number of proposals in S. 2652 are unnecessary and premature.

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Specifically, key areas of concern ATMI would like to address in this statement are: 1. The Administration's proposal in S. 2652 which allows EPA to assess civil penalties for minor violations without judicial review. 2. The proposed modifications to the criminal penalties. 3. Common law remedies. 4. The process modification fees.

We believe these amendments are unnecessary, given the Agency's current enforcement record and the fact that 90% of major industrial facilities are in compliance. ATMI is concerned that these amendments may be used unfairly to harass industry despite good faith efforts to comply with all regulations, and strongly recommends that they be dropped.

Administrative Civil Penalties

EPA's existing enforcement mechanisms include the issuance of penalties, injunctions or criminal sanctions and are adequate to insure compliance with all statuatory requirements. While the Agency insists this provision is not intended to apply to isolated instances of either unpermitted discharges or dischargers exceeding permit limitations, the proposed language is open to such abuse. The Administration is given the authority to assess a civil penalty for a violation of any permit condition or limitation. Only in determining the amount - not in initiating the administrative order - is the Administrator required to take into account the nature and circumstances of the violation. Unless one can assume that daily and monthly permit limitations can be met 100% of the time, administrative penalties raise substantial questions of fairness. Despite application of the appropriate control technology, permittees frequently face excursions of daily maximum

limits although monthly averages are met. These must be recorded on the monitoring report form and submitted to the permitting agency. In essence, a permittee would be subjecting himself to possible harrassment from EPA for minor excursions because he properly monitors and reports his discharge.

This provision also encourages the Administrator to second-guess state enforcement activities and is contrary to EPA's stated goal of delegating increased responsibility to the states. Ms. Gorsuch has stated that she believes better environmental protection can be achieved if EPA allows the level of government closest to the point of control enough flexibility to implement the protective program best suited to the area and the people who must live in it. It follows then, that the authority to assess administrative penalties should remain with the states which currently have such authority and are in a better position to resolve the factual issues involved.

EPA has the authority and reviews state actions to insure that states properly enforce the NPDES requirements. States are required to submit to the Regional Administrator quarterly reports of any permit violations/non-compliance. To the extent EPA believes state judgements or settlements provide penalties in amounts EPA believes to be substantially inadequate, the Agency may commence separate actions for penalties.

Finally, these provisions duplicate existing state efforts and accountability. The proposed hearing requirements will increase administrative burdens on EPA and subject industry to substantial time and costs to demonstrate why minor violations should not be penalized. This could turn into a routine wrist-slapping exercise for violations that should not result in fines; the provisions should be abolished.

Criminal Sanctions

Sec. 9 of the proposed bill substantially increases the existing felony sanctions without demonstrating the need for such sanctions. While we agree that knowing violations endangering public health and the environment warrant criminal sanctions, the draft bill greatly and, we believe, wrongly expands the type of violations subject to the felony provisions.

Although the existing Sec. 309 of the Clean Water Act provides for a possible prison term and fine for negligent violations, it does not classify them as felonies. Under the Administration's proposal, ordinary negligence would classify any environmental mishap as a felony subject to criminal sanctions regardless of the magnitude and consequences. This is contrary to both statuatory and case law which do not normally apply felony sanctions for ordinary negligence. For example, a minor violation resulting from oversight conduct by a plant operator such as failure to properly close a valve, or malfunction of equipment may be cited as ordinary negligence; however, it does not justify criminal sanctions. In addition, Sec. 309 improperly changes a "willful" violation to a "knowing" violation. We oppose this change since someone may have knowledge of a violation without willfully or purposely causing it. Both of these changes have far-reaching implications which clearly go beyond the Administration's stated intent to eliminate the discrepancies between RCRA and water enforcement activities and should be eliminated.

For the first time criminal sanctions would also apply to discharging a pollutant or hazardous substance into a sewer, where the discharge "may cause" personal injury or property damage or causes the treatment works to violate its permit. "May Cause" is too vague and capriciously applied to subject a permittee to determining whether his discharge - although permitted - has the potential of causing harm and may later be subjected to enforcement action. Further, it is inappropriate to apply criminal sanctions for discharges that cause a minor violation of a POTW limit but does not lead to personal injury or environmental harm.

Sec. 9 also greatly expands the definition of a "hazardous pollutant" from the existing act, by including all substances listed under Sec. 102 of Superfund, Sec. 3001 of RCRA, Sec. 112 of the Clean Air Act, and any chemical for which the Administrator has taken action under Sec. 7 of TSCA. These substances were listed under the above acts for purposes totally unrelated to problems they may pose when discharged to water. The current Clean Water Act under sections 31 and 307 already controls substances which create dangers when discharged or spilled in designated quantities into the water. It makes no sense to subject the regulated community to criminal sanctions for the discharge of any hazardous substance, regardless of quantity and the impact on the receiving stream. In fact, effluent guidelines limitations specifically address the analytical characteristics of industrial influent and effluent characteristics to determine which pollutants require limits. It is unwarranted, therefore, to subject industry to criminal penalties for a discharge of a "hazardous substance" that may tacitly have been approved through the guidelines process by the Administrator's decision not to establish a limit. Although the proposed bill provides an affirmative

defense, it is limited to pollutants or hazardous substances specifically limited in the permit.

ATNI strongly opposes the changes to the criminal sanction. However, if modifications are to be made, a more reasonable approach would be the following:

Section 9(1) & (2), is amended to read as follows:

"(1) Any person who (A) by criminal and gross negligence violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) by criminal and gross negligence introduces into a sewer system or into a publicly owned treatment works any toxic pollutants listed under Sec. 311 and Sec. 307 in designated quantities which causes personal injury or property damage shall be punished by a fine of not less than $2,500 and no more than $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

(2) Any person who (A) willfully violates section 301, 302, 306, 307, 308, 318, or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act by the Administrator or by a State, or any requirement imposed in a pretreatment program approved under section 402(b)(8) of this Act or in a permit issued under section 404 of this Act by the Secretary of the Army or by a State, or who (B) willfully introduces into a sewer system or into a publicly owned treatment works any toxic pollutants listed under Sec. 31 and Sec. 307 in designated quantities which causes personal injury or property damage shall be punished by a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than two years, or by both".

Common Law Remedies

We oppose any amendment which would attempt to overturn the Milwaukee decision in which the Supreme Court ruled that federal common law had been "pre-empted" by the Clean Water Act. The courts should not be encouraged to "second guess" administrative permit decisions. Industry is currently required to expend considerable sums of money and invest significant amounts of personnel time to comply with Federal statutes designed to protect against environmental

degradation and negative effects on human health. Unfortunately, after making such expenditures of time and effort, industry is frequently unable to utilize its compliance with these Federal statutes as a defense in the areas of common law nuisances and trespass. The enactment of laws such as the CAA and CWA have appropriately heightened the public's awareness of the need for environmental care. At the same time it has generated a plaintiff's bar that really should not be. The compliance with environmental rules, as established through the Administrative process, utilizes the expertise of individuals most capable of dealing with environmental problems and requires the application of the best available technology. Industry should be able to use its compliance as an effective shield against allegations of common law nuisance and trespass. Subjecting the regulated community to unlimited Federal liabilities despite their compliance with all applicable regulations, will only serve to encourage further lawsuits and become an additional obstacle to the implementation of sound wastewater discharge programs.

Environmental Modification Fees

Sec. 4 allows the Administrator to charge processing on fees applications for modifications and exemptions submitted to the Administrator. This provision creates several concerns. First, industry is already subjected to substantial costs and time to provide the necessary data to justify a waiver. Since the Administrator already has the authority to request any additional information he/she may deem necessary for determining whether to grant a permit, the proposed fees create a strong incentive to increase data requests from industry knowing they must pay not only to provide the information, but also EPA's reviewing time. While the fees collected are limited by the total

appropriation, the agency's appropriation request will be based on expected workload and is open-ended. Finally, the fees will be particularly burdensome on small businesses which are already hesitant to apply for waivers or exemptions they may be entitled to because the cost of the demonstration is more than the relief likely to be obtained. This fee will put small business at an even greater disadvantage.

In conclusion, we believe the amendments discussed above are unnecessary and should be dropped. We appreciate the opportunity to submit this statement and hope these issues will be given further consideration and the opportunity for a full hearing before this Committee.

American Water Works Association

July 23, 1982

Honorable John H. Chafee
Senate Committee on Environment
and Public Works
4204 Dirksen Senate Office Building
Washington, DC 20510

Re: Clean Water Act Amendments

Dear Senator Chafee:

The American Water Works Association (AWWA), would like to submit the following statement for the record in connection with the hearings you are holding on July 28 and 29 relative to the Clean Water Act.

Please let the record reflect that the AWWA strongly supports the Administration's recommendations that dams be specifically excluded from regulation as point sources under the Clean Water Act. Dams should not be required to obtain NPDES permits.

The Association recognizes that several other groups who share our position will be testifying before your committee. We therefore will keep our comments brief inasmuch as it is our understanding that many groups who share our views will elaborate on the impracticality of regulating dams as point sources. There may be as many as 2,000,000 dams in the nation. They are used for a variety of purposes. Many of these dams are used for community water supply and are owned, operated, or otherwise used to provide drinking water by AWWA members. As others no doubt will explain in more detail to you at the hearings to be held on July 29, the costs of permit paperwork and controls would be enormous without corresponding benefits.

Experts from within our Association advise us that water quality problems associated with water supply dams are either nonexistent or insignificant. They certainly do not rise to the level of requiring a massive federal regulatory program. Should any environmental problems develop with a few dams which require correction, certainly other federal and state regulatory programs exist to correct these situations.

Accordingly, we urge the committee to support legislation which will insure that dams are not considered point sources and that dams are exempt from regulation under the NPDES permit program.

Sincerely,

James B. Graff
Deputy Executive
Director

JBG/ew

GOVERNMENT AFFAIRS OFFICE 1010 Vermont Ave., Suite 810, Washington, D.C. 20005 (202) 628-8303

Association of
Metropolitan
Water
Agencies

August 5, 1982

The Honorable John H. Chafee
Chairman
Subcommittee on Environmental
Pollution
Committee on Environment
and Public Works
United States Senate
Washington, D.C. 20510

1015 Eighteenth St. NW
Suite 200
Washington, D.C. 20036

(202) 835-2218

Member Agencies

Akron Public Utilities Bureau
Albuquerque Water Resources Department
Anchorage Water and Sewer Utilities
Atlanta Water Bureau
Baltimore Water Division
Boston Water and Sewer Commission
Metropolitan District Commission, Boston
Cleveland Department of Public Utilities
Detroit Water and Sewerage Department
Fort Worth Water Department
The Metropolitan District, Hartford
Houston Department of Public Works
Kansas City Pollution Control and Water Departments
Knoxville Utilities Board
Los Angeles Department of Water and Power
Marin Municipal Water District
Nashville Department of Water and Sewerage Services
New York City Department of Environmental Protection
Passaic Valley Water Commission
Philadelphia Water Department
Phoenix Water and Sewers Department
Portland Bureau of Water Works
Tampa Water Department
Toledo Department of Public Utilities
Tucson Water Department
Washington Suburban Sanitary Commission

Dear Mr. Chairman:

This letter will serve to advise the Subcommittee of the position of the Association of Metropolitan Water Agencies with regard to the provisions of S. 2652, which would amend the Clean Water Act. Our concerns are limited to the provisions in the bill involving the regulation of discharges from dams and impoundments. I request that this letter be made part of the record.

The Association of Metropolitan Water Agencies was formed in June of 1981 to serve as a voice for the publicly-owned water supply agencies in our Nation's larger cities. Twenty-six major U.S. cities are represented in AMWA, and their water utilities provide a safe and adequate supply of drinking water to over 31 million people.

In response to the Court's ruling in National Wildlife Federation v. Gorsuch, the Environmental Protection Agency has proposed amendments to the Clean Water Act which would essentially exempt discharges from all dams and impoundments from regulation under the NPDES permit program. The amendments also provide that the States may identify any water quality or water quantity problems which may be associated with dams under the "continuing planning process" established under Section 303(e) of the Act. Other legislation which would overturn Judge Green's decision has been introduced by Senators Murkowski and Hart, and by Representative Kogovsek.

Clearly, legislative relief from the impacts of this court decision is needed. EPA is simply not equipped to handle either individual or general permits for over 2 million dams. Additionally, such a commitment of resources would be grossly out of proportion to the size of the water quality problem caused by dams. This is particularly evident in the case of dams which store and divert water for publicly-owned water supply agencies. EPA regulation of these facilities would unnecessarily place an economic burden on local government agencies by requiring them to conduct superfluous monitoring and water quality planning studies. Perhaps more importantly, the regulation would not accomplish anything in terms of water quality improvements, and

it certainly would not contribute to the protection of public health. As demonstrated by the results of a recent survey of our member agencies, the technical basis is more than adequate to justify a specific legislative exemption from regulation under the Clean Water Act for those dams and impoundments used to supply drinking water for publicly-owned municipal water supply agencies. Specific legislative language to accomplish this has been prepared and is enclosed for your consideration.

Over 70 dams and impoundments are used by our member agencies to store and divert almost three trillion gallons of water for use in their cities. Most of the dams are single-purpose drinking water supply facilities, and only a few have flood control or hydro-electric generating capabilities. Water quality problems at these 70 dams are almost non-existent and, where they have occurred, problems have often been resolved voluntarily, usually in cooperation with State fish and wildlife agencies or water quality authorities. Simply stated, the dams which store water for distribution by the publicly-owned water supply agencies in many of America's biggest metropolitan areas are not causing water pollution problems which would warrant another regulatory program, or even consideration in a State 303(e) plan. As such, they deserve to be excluded from a regulatory program which would needlessly impose expensive monitoring requirements on local public agencies which are already burdened with expensive regulatory requirements.

The Clean Water Act was not intended to be used as an instrument to frustrate the efforts of local governments who are bound by long-standing tenets of public health policy and the provisions of the Safe Drinking Water Act to provide an adequate supply of high-quality drinking water to their customers. We are encouraged by your interest in this important issue, and we hope you will give our suggested amendment your consideration.

Sincerely,

Donald R. Boyd

Donald R. Boyd
President

STATEMENT
of the
Association of California Water Agencies
on
Proposals to Amend the Clean Water Act

The Association of California Water Agencies strongly supports clarification of the Clean Water Act to exclude dams from the pollution discharge permit program imposed by the interpretation in National Wildlife Federation vs. Gorsuch. It is clear that this interpretation was not intended by Congress and this view is amply supported by the continuous understanding of the requirements of the Act since its passage by the Environmental Protection Agency during four Administrations.

California, as a state with very limited precipitation except during the winter months, depends heavily upon surface storage in reservoirs for its water supply during the larger part of the year and in major cities such as San Francisco and San Diego which have practically no groundwater basins, this dependence is yearround. These very expensive structures are essential for the public water supply for millions of people, important industry and extensive irrigated agriculture and a new layer of regulation over their operation could well disrupt their usefulness to meet these needs.

The Clean Water Act was clearly intended to meet a pressing public need, that of controlling the introduction of pollutants into our rivers, lakes and streams. Requirements of the Act associated with construction of dams were included under Section 404 and operations in Section 304 and were not considered under provisions regulating point sources of pollution. The

Environmental Protection Agency has estimated that there are over two million dams in the United States and to require that they be subject to NPDES procedures would not only distort the Act but would impose an intolerable regulatory burden and extraordinary costs on the entire regulatory process.

In California and throughout the West, water supply reservoirs are carefully regulated through a long standing system establishing water rights under state law. To subject the operation of these reservoirs now to an added layer of government regulation would interfere with vested rights and impose new burdens and costs on the operators and water users.

We believe that the clarifying amendments in S. 2280, H.R. 6344 and H.R. 6671 will most clearly restate Congress' intention. Our support of these bills is to continue the interpretation of the Act prior to the National Wildlife Federation case and not to otherwise change or amend other provisions of the Act. The language of these bills would reaffirm past practice, permit the operation of dams to be addressed through other mechanisms of the Act and avoid the major disruption of our present water supply systems sure to follow as a result of the Court's decision.

STATEMENT OF

BOB BARKER, BASS ANGLERS SPORTSMAN SOCIETY

ON THE CLEAN WATER ACT

Mr. Chairman, members of the Committee, my name is Bob Barker and I am the National Conservation Director of the Bass Anglers Sportsman Society. B.A.S.S. is a national organization of bass fishermen of approximately 400,000 members. I appreciate this opportunity to express the views of my organization with regard to the Clean Water Act which is being reauthorized by Congress.

Section 404

The 404 permit program regulates dredge and fill activities in our nation's waters and wetlands. This program was established by Congress in 1982 because of the alarming widespread destruction of wetland areas that was taking place. Nearly half of our nation's original wetlands in the lower 48 states have been lost to various developmental activities; approximately 150 million acres. Even though the 404 permit program saves an estimated 330,000 acres of wetlands annually according to the U.S. Army Corps of Engineers Water Resources Institute, an estimated 330,000 acres are still lost each year. It is, in my estimation, unreasonable to allow drastic increases in wetland losses such as those which would result from proposals to reduce the scope of jurisdiction of the 404 program to traditionally defined navigable waters. The provisions of S. 777 would result in a loss of protection for all but a small portion of the nation's wetlands.

Wetlands are vitally important to water quality, flood control and fisheries resources. Many sport and commercial species of fish are dependent upon wetlands for some stage of their life cycle. Wetlands provide spawning and nursery habitat, protective cover and organisms that are vital elements of the food chain. One dramatic example of the importance of wetlands is contained in an article which recently appeared in SPORTS ILLUSTRATED, which I request be entered into this hearing record along with this statement.* The article discusses how drainage and other developments have eliminated sufficient

*The article referred to has been retained in the committee files.

amounts of wetlands in the Kissimmee River Basin in Florida to disrupt the hydrologic cycle so as to drastically reduce fish and wildlife populations in the watershed and Everglades National Park.

Approximately 3.8 billion dollars worth of wetland dependent fish are harvested annually by the fishing industry, and recreational anglers spend approximately 15.2 billion dollars on their sport according to the Fish and Wildlife Service's 1975 National Survey of Hunting, Fishing and Wildlife Associated Recreation. Wetlands also purify water and reduce flood damages, functions that would otherwise entail significant costs to accomplish.

Complaints of excessive regulation and excessive delay in the permit issuing process have arisen, but when the evidence is examined, I believe these complaints are exaggerated. Although the 404 program has a broad scope, as intended by Congress, many activities are exempted from the permitting process. For example, normal activities of farmers, foresters and ranchers are exempted. Also, general permits allow many activities to take place as long as certain conditions are observed and the activities have only minimal adverse environmental impact and minimal cumulative adverse effect. Also, 70 percent of all permit applications are non-controversial, and from 1977 to 1981 took an average of 75 days to process. The more controversial applications required a significantly longer period of time to process, but this is reasonable since the potential damage of large-scale projects is significant. Oftentimes permits are issued to allow development in wetlands, but losses of wetlands are drastically reduced because of mitigation measures or changes in the project that occur because of the interagency participation in the permit process. Often project modifications save developers money above and beyond the costs involved in obtaining a permit.

It does not make economical or environmental sense to virtually dismantle the Section 404 permit program as the proposal before this committee would do, and the Bass Anglers Sportsman Society strongly opposes legislative changes

to Section 404 of the Clean Water Act. At the same time, our organization will cooperate to achieve administrative fine-tuning of the program to eliminate any existing difficulties as long as our nation's wetland resources are not threatened.

Toxic Substances

Toxic substances are an insidious threat to fisheries resources. They do not have the high visibility of some other forms of pollution which have been very successfully addressed by the Clean Water Act, but they nonetheless pose serious problems. B.A.S.S. has a long history of concern and involvement in problems caused by the discharge of toxic substances into our nation's waters.

In June 1977, B.A.S.S. brought suit against the E.P.A. because of their lack of enforcement of the pretreatment standards for industries discharging toxic wastes into municipal sewage treatment facilities. The particular toxic in question was polychlorinated biphenyls (PCB's). At that time there were twenty-nine plants, located in six of the ten E.P.A. regions, using PCB's in their manufacturing process. Of these only six had NPDES permits. Two had not applied for permits and the other twenty-one were not required to have permits since they discharged into a municipal treatment plant. These plants were required by law to pretreat their waste. Our suit contended that E.P.A. was negligent in their enforcement of the pretreatment program. The E.P.A. has yet to issue the mandatory pretreatment standards for the twenty major industrial categories, (except electroplating and timber products).

Now they are sequesting that pretreatment requirements be made discretionary. We are opposed for obvious reasons.

Municipalities cannot control industrial input into their systems. Without exception, the very industry or industries to be regulated are contributing substantially to the economy of the city or town. Thus it would be politically suicidal for local elected officials to insist on the industry or industries pretreating their wastes.

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Numerous other examples could be cited regarding point source discharge of toxics into the nation's waters. One such example is High Rock Lake, Davidson County, North Carolina. Mercury discharges from a Duracell Battery plant resulted in the closing of a creek and one major arm of the lake to commercial fishing in 1981. The state placed warning notices around the lake to the recreational angler regarding consumption of mercury contaminated fish flesh. Other fisheries closings have made headline news in many parts of the country.

These limited examples barely indicate the magnitude of the problem of toxic contamination of our waters and the fish that inhabit them. The broader public health effects are obvious as well. Currently the Clean Water Act addresses the toxic problem, although significant delays in issuing pre-treatment standards for industries discharging into municipal sewage treatment facilities have caused disappointing lack of results in this area. However, the proposal currently before this committee in S. 2652, to make issuance of pretreatment standards by E.P.A. discretionary, is a tremendous step backwards in resolving the toxics problem. Also, with respect to direct discharges of toxics, the attempt to delay imposing limits for standards and compliance based on best available technology (BAT) is regressive. Similarly, attempts to delay implementing standards for discharges of toxics for new sources and further exemptions for Federal facilities are unacceptable in view of the serious nature of toxic contamination.

Thermal Discharges

Because of coal and nuclear power production, which the Administration recommends we increase, thermal discharges into our nation's waters are inevitable. Thermal discharges can even be beneficial to fisheries if they are properly managed. Excessive temperatures or drastically fluctuating discharges can have disastrous effects on fisheries. Although different species

of fish have different temperature range requirements for survival, excessive thermal discharges will destroy even warm water species. Thermal discharges of 90 to 100 degrees F occurred at Lake Hyco in Person County, North Carolina, causing several fish kills. Lake Hyco is a warm water reservoir fishery, but even warm water species such as bass experience severe stress reactions at approximately 85 degrees F and are killed at 87 degrees.

B.A.S.S. therefore supports controlled thermal discharges and the current Clean Water Act provisions that provide for maintenance of balanced populations of indigenous fish. The alternative to this requirement proposed in S. 2652 would allow for destruction of fish populations if the discharging utility mitigated the damage with put-and-take hatchery stocking. This proposal could also serve to greatly reduce or eliminate the participation of fish and wildlife professionals from the assessment process, which is required to maintain balanced populations of indigenous fish.

Dams as Point Sources

B.A.S.S., through its affiliation with the American League of Anglers, an association of sport fishing organizations dedicated to the preservation and enhancement of our nation's sport fishing resources, has filed an amicus curiae brief in the Appeal of the case National Wildlife Federation v. Gorsuch because of the significant problems with levels of dissolved oxygen, sedimentation, supersaturation, toxics and thermal pollution caused by 1000 to 1500 dams nationwide. The court has in its decision upheld the view that Congress intended dams to be regulated as point sources of pollution in keeping with the goals of the Clean Water Act. We cannot support the proposal to change course in midstream and change the law to suit E.P.A.'s purposes.

Management of discharges from dams can benefit downriver fisheries and reservoir fisheries. Lack of management can cause a river to be devoid of game fish populations and can drastically disrupt reservoir fisheries as well.

B.A.S.S. has been a proponent of a strong Clean Water Act and was involved in the reauthorization process in 1977. The Clean Water Act is certainly no less important today than it was in 1977 even though our nation's waters are cleaner today because of it. We have yet to reach the goal of fishable, swimmable waters throughout the nation, and continued efforts to improve the chemical, biological and physical integrity of our waters are necessary.

OFFICE OF THE
BOROUGH MANAGER SECY.

TELEPHONES
295-8181
295-8182
295-8183
295-8184

BOROUGH OF MORRISVILLE
INCORPORATED A. D. 1804
MORRISVILLE, BUCKS COUNTY, PA. 19067

Statement on S. 2652

Proposed Amendments to the

Federal Water Pollution Control Act

and the

Clean Water Act

before

Environmental Pollution Subcommittee,

U. S. Senate Committee on Environment and Public Works

July 29, 1982

My name is Gretchen Leahy, and I have been Environmental Coordinator for the Borough of Morrisville since 1973.

The Borough of Morrisville is a small municipality of about 10,000 people located at the head of the Delaware Estuary and at the edge of the greater Philadelphia metropolitan area. Our water intakes are situated immediately above head of tide, and our waste treatment plant, a regional facility serving about 35,000 people is located approximately a mile downstream in tidal fresh water.

A number of Borough Officials have participated extensively in a wide range of water quality management studies at local, county, state and regional levels for the past several years. We have also worked in close

conjunction, since its formation in 1968, with the Pollution Control Group of Lower Bucks County, a regional municipal/industrial technical advisory committee of which we are a member.

Some of our major concerns have been the impacts of planned and proposed water resources projects and programs in the Delaware River Basin on water quantity, quality and cost interrelationships as they relate to the Delaware Basin and its people as a whole and to this municipality in particular. We are already paying costly water charges to the Delaware River Basin Commission, and the Commission is considering requiring us to upgrade our waste treatment facility despite the fact that we are already at a higher level of secondary waste treatment than virtually any other discharger on the Estuary (75% removal of BOD_5).

A federal "Level B" Study was recently completed for the purpose of making major changes in the Delaware River Basin's Comprehensive Plan.

We are deeply concerned that neither this Study nor the currently proposed changes in the Basin's Comprehensive Plan nor the proposed amendments in S. 2652 include any provisions to assess and plan for the economic and environmental impacts of dams, a matter to which we have testified before many agencies for many years.

Nor does S. 2652 provide for a cost-effectiveness analysis of planned or proposed programs and projects or for due economic compensation for those areas adversely affected by such dams and related programs or appurtenances.

As now proposed, the amendments assume that any adverse environmental impacts can be offset when such is not always the case. For example, it is

assumed that the pollutional loading of dams can be offset through implementation of higher pollution abatement and/or waste treatment requirements for municipal and industrial point source dischargers along the waters below the dam.

Because the Delaware is a small river without the strong, positive flow that larger rivers have all the way to the sea, the impact of manipulated flows is substantial, both in terms of water quantity and quality and in terms of dollar cost to this municipality.

We are attaching as a part of this statement a compilation of past testimonies of this municipality and the Pollution Control Group of Lower Bucks County before various agencies over the past decade and more. This document was prepared at the conclusion of the Delaware River Basin Comprehensive (Level B) Study as part of our active participation throughout the course of that Federal Study. You will note that the attachment supports our continuing concern.

We would also call your attention to the July 29, 1982 statement and attachment of the Pollution Control Group of Lower Bucks County which provides additional technical support for our position.

Respectfully submitted,

Gretchen V. Leahy

1 Attachment: Final Comments of Level B. Study, December 31, 1979

Note: The attachments referred to in this statement have been retained in the committee files.

CH2M HILL
engineers
planners
economists
scientists

TESTIMONY OF CH2M HILL

ON

AMENDMENTS TO THE FEDERAL
WATER POLLUTION CONTROL ACT

BEFORE THE
SUBCOMMITTEE ON
ENVIRONMENTAL POLLUTION
OF THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

CH2M HILL
Governmental Affairs Office
1090 Vermont Avenue, N.W., Suite 560, Washington, D.C. 20005 202/289-0220

STATEMENT ON CLEAN WATER ACT

Mr. Chairman and Members of the Subcommittee on Environmental Pollution, my name is Richard L. Corrigan. I am CH2M Hill's Vice President for Governmental Affairs. This statement represents the views of the consulting engineering firm of CH2M Hill on several important issues which you face when considering reauthorization of the Clean Water Act.

CH2M Hill is the seventh largest consulting engineering firm in the country. We have a staff of approximately 2,000 employees with over 35 offices in the United States and worldwide. Since 1946, the firm has been providing clients -- governments at all levels and various segments of the private sector -- with comprehensive services in engineering, planning, economics and the environmental sciences in nearly all of the fifty States. Though multi-disciplined and providing comprehensive services, CH2M Hill has focused heavily on environmental and water use matters.

Our comments here are limited to three important issues: (1) Dams being considered point sources of pollution by Federal courts; (2) Legal remedies against alleged pollutors; and (3) The 404 Permit Process.

As one of the nation's largest engineering firms, CH2M Hill has prepared numerous studies and designs for construction of dams for hydroelectric, irrigation and flood control purposes. Our staff has comprehensive experience in the environmental, scientific, legal, and economic issues surrounding construction and operation of water impoundment facilities of all types. Because of this experience we are alarmed with the recent District of Columbia Federal Court decision making dams subject to regulation as point sources of pollution, and urge Congress to act promptly to limit the court's unwarranted expansion of the Clean Water Act beyond its intended purposes.

If Congress does not clarify its intent promptly and if the decision of the Federal District Court of the District of Columbia is upheld, all existing and future dams will be regulated as point sources of pollution and as such will require National Pollution Discharge Elimination System (NPDES) permits for their continued operation or construction. This, in our professional opinion, would be a tragic waste of time and scarce resources. NPDES permits are unnecessary for both old and new dams.

With regard to existing dams, most of these have already undergone an extensive analysis of their probable impacts on water quality prior to the issuance of water quality certifitates. Before a water quality certificate can be issued for any dam, its design must pass a series of Federal, State, and public environmental reviews.

At the Federal level, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Corps of Engineers (through the

issuance of Section 10 and Section 404 permits) review the environmental impacts of virtually every dam proposed for construction in the United States. Depending on the purpose of the dam, additional environmental reviews may be performed by such agencies as the Environmental Protection Agency, the Federal Energy Regulatory Commission, the Bureau of Land Management, the United States Forest Service, the Bureau of Reclamation, and the Bureau of Indian Affairs. All of these agencies consider the proposed dam's effects on water quality, and they each can recommend specific water pollution mitigation measures that the dam's sponsor must provide.

In addition to this Federal review, every State has agencies charged with the preservation of fish, game, and water quality. Like those of the Federal government, these agencies review dam proposals and are empowered to require water pollution mitigation measures. At both the Federal and State levels, the legal requirements for public involvement in dam licensing, through hearings and written testimony, act as yet another check against water pollution from dams.

The requiring of NPDES permits for existing dams would necessitate spending billions of dollars needlessly to prepare permits and to retrofit these structures with largely unneeded water quality control equipment. Where will the money come from? Ratepayers? Taxpayers? The retrofitting of dams supported by public utility rate bases might greatly increase costs to domestic consumers and industries. Will Federal, State or local authorities and ultimately taxpayers be similarly responsible for flood control and other non-revenue producing water impoundment facilities? In addition, changes in dam operations would also be required: hydroelectric energy production would be reduced, water for irrigation would diminish, recreational opportunities would be limited, and, in some cases, vital flood control capacity would be lost.

Since current review processes as described earlier are very comprehensive, NPDES permitting of new dams will provide very little additional water quality protection. Yet, requirements for acquisition of NPDES permits will raise costs and further delay the already long, complicated, and frequently costly licensing and construction of hydroelectric projects. Collecting and submitting data to the FERC for the licensing of a hydroelectric dam alone, for example, now often requires more than 18 months of engineering and legal work by the project's sponsor. An NPDES Permit requirement will simply add to huge investment costs, thereby discouraging the growth of hydroelectric energy while yielding few tangible environmental benefits.

Further, requiring NPDES permits for dams will divert EPA's staff and limited resources from more important environmental responsibilities. It has been stated by EPA that issuing permits for approximately the 60,000 existing major dams would require EPA and the states about 9-14 years. By that measure, one can only speculate how long it would take to cover the approximately 2 million other dams which might have to be regulated. The direct costs to the taxpayers would be staggering!

We do not believe that token environmental benefits justify these huge economic and other costs, nor would they be good public policy at a time when the development of renewable energy resources like hydroelectricity serves the national interest. Hydroelectric energy, besides being renewable, poses few of the environmental and health risks of other forms of generation, such as coal burning and nuclear power. Further, hydropower generation will help save costly and scarce fossil fuels. A hydroelectric dam, through control of downstream flooding and sedimentation, can also have beneficial effects on the dam's immediate surroundings.

Thus, we strongly support legislation, either in the form of a separate bill or as part of the comprehensive reauthorization of the Clean Water Act, which will re-establish the intent of Congress that dams not be regulated as point sources of pollution.

The second major subject which CH2M Hill wishes to address is attempts to overturn the United States Supreme Court's recent City of Milwaukee v. Illinois Decision. Our professional staff, which has extensive experience in wastewater treatment, our clients, and others interested in rational and responsible environmental policies were shocked at the effort made on the floor of the Senate last year to include language in the then pending Construction Grants reauthorization which would have overturned the doctrine contained in this landmark court decision. What is most regrettable about that proposed amendment was its attempted inclusion on the floor without benefit of public hearings or discussion. Since a commitment to reconsider the subject at this time was made during the Conference on PL 97-117, we are addressing it here.

We believe that the Supreme Court decided wisely in ruling that the Clean Water Act preempts common law. Municipalities and industries legally operating under conditions of their waste discharge permits ought not to be subject to lawsuits, delays and harrassment based on other grounds. Congress, in enacting the Clean Water Act, provided a workable statutory scheme for the creation of uniform Federal standards.

Many who have testified before this Subcommittee at various times, regardless of their perspective, have conceded that the Clean Water Act provides a workable mechanism for helping to better our environment. Municipalities and industries know what is expected of them. The last thing Congress should do is to allow this widely accepted and reasonably well understood statute to be tampered with by individual courts and judges.

In an area as complex as water pollution control, Congress, and not the Federal Judiciary, has the responsibility to set and maintain clear and consistent standards for all. Congress must not permit persons or groups having ideological axes to grind to shop around for sympathetic judges who will by their decisions cause confusion and social and economic harm. If someone fails to meet the standards of the Clean Water Act, there already is an appropriate legal remedy; that is to bring suit under the Clean Water Act. There is no need to return to the common law.

The third issue which concerns CH2M Hill is that of the Section 404 Permitting Process. While this subject is not addressed in the Administration's proposal, we believe that this matter must be included in any comprehensive reauthorization bill. CH2M Hill is extensively involved in environmental permitting of all types. Consequently our experience causes us to recommend modification of the Section 404 Permitting Process. Meaningful reform of the Section 404 Permit Process should focus on providing the means to insure expediting of decision making (to have a decision either way is beneficial) and limiting Permit requirements to truly navigable waters.

It is unrealistic, unfair, and economically harmful, regardless of one's perspective on a specific project, to allow endless delays and non-decisions to consume vital time, energy and resources. We must not allow persons opposed to projects for social, economic or ideological reasons to continue to take advantage of the 404 Permit Process to delay and thus defeat projects which they cannot otherwise successfully oppose.

While CH2M Hill would like to see a comprehensive reauthorization of the Clean Water Act, the time remaining for the 97th Congress will likely not permit it. Because of these and many other issues which you must consider deserve careful attention, it may be better to pass a simple one year extension of expiring provisions. This extension could contain such urgent items as addressing the matter of redefining, for the benefit of the courts, the intent of Congress that dams not be considered point sources of pollution

CH2M Hill, its 2,000 employees and our various clients thank you for the opportunity to express our views on these very important subjects.

Chevron U.S.A. Inc.
1700 K Street, N.W., Washington, DC 20006

Frank W. Bradley
Vice President

August 2, 1982

The Honorable John F. Chafee
United States Senate
Washington, DC 20510

Dear Senator Chafee:

We greatly appreciate the opportunity that you gave Mr. R. W. Kreutzen of Chevron U.S.A. Inc. to testify on behalf of the American Petroleum Institute at the hearing held by the Subcommittee on Environmental Pollution on July 22, 1982. It was clear from that hearing, as well as the other hearings that your Subcommittee has held on amendments to the Clean Water Act, that you intend to consider thoroughly, and with an open mind, all of the issues that have been raised by the various parties that are affected by the Act.

In order to present Chevron's views on the Act to your Subcommittee for consideration, we have prepared the enclosed statement which summarizes those issues that are of concern to us. In addition, we believe that sufficient information may not have been made available to your Subcommittee on certain of the issues discussed in the enclosed statement. Therefore, we have also enclosed more detailed reports on nine of the issues discussed in our statement.

We greatly appreciate the opportunity to present the enclosed material to you. We request that it be made part of the formal hearing record, and that it be considered as part of your Subcommittee's review of amendments to the Clean Water Act.

Yours very truly,

F. W. Bradley

Enclosures

Statement

of

Chevron U.S.A. Inc.

to the

Subcommittee on Environmental Pollution

of the

Senate Committee on Environment and Public Works

Regarding Amendments

to the

Clean Water Act

August 2, 1982

INTRODUCTION

Chevron U.S.A. Inc. appreciates this opportunity to provide its views on amendments to the Clean Water Act. We believe that for the most part, the current Act has worked quite well and much has been achieved under the Act. There are, however, a few provisions which unnecessarily burden those who must comply with the Act while contributing little to enhancing the quality of the Nation's waters.

Although the Administration's proposal to amend the Clean Water Act (S.2652) does address certain issues of concern to Chevron, and does correct certain problems with the Act (particularly in sections 2, 5, 6 and 12), it does not address many of the issues which we believe require review by the Congress. Therefore, we are concerned that the five year reauthorization called for in S.2652 would prove to be a disincentive to obtaining needed amendments to the Act during the next five years. Thus, we urge Congress to consider all the issues prior to final consideration of the Act. If time does not permit a comprehensive review this year, Chevron recommends a one year reauthorization be considered to ensure that all of the important issues raised by the Clean Water Act which are not reviewed this year will be considered next year.

Chevron has prepared the following list of sections of the Clean Water Act that are of greatest concern. These are sections of the Act which we believe impose a burden on Chevron without being balanced by a benefit to the environment. Some of the issues listed below are issues that affect Chevron more severely than other dischargers. In addition, there are some issues for which we believe little information has been provided to Congress even though the issues are of concern to many dischargers. The first nine issues listed below fall into one of these two categories, and we have attached individual reports on those issues to explain in detail how they affect Chevron's day to day operations.

The remainder (issues 10-13) address problems which are not exclusive to Chevron's operations, but are common to many industries and for which we believe Congress has sufficient information.

CHEVRON'S PRIORITY ISSUES

1. NPDES Requirements for Insignificant Dischargers of Pollutants

The Clean Water Act as currently written requires an NPDES permit for every point source discharge of water containing pollutants even if the discharge is of a very small quantity of water containing only minute quantities of extremely benign pollutants. (There is a minor exception under section 402(l) for the return flow from irrigated agriculture.) Although EPA has tried to give some relief by defining certain discharges of uncontaminated storm water runoff to be nonpoint sources not requiring NPDES permits and by providing for general permits for a group of similar discharges in the same geographical area, requiring NPDES permits for insignificant point source discharges and channeled storm water runoff containing insignificant amounts of pollutants continues to impose a great burden on both the discharger and the permit issuing authority without a corresponding benefit to the environment.

2. Ocean Discharge Criteria

According to the legislative history of section 403 "Ocean Discharge Criteria," it was originally enacted to keep the oceans, to the extent feasible, in their natural state both for recreational purposes and to exploit the natural resources of the ocean. The section sets forth standards which a discharger must comply with before a permit can be issued for a discharge of pollutants into the territorial sea, the contiguous zone, or the ocean. It also requires the Administrator to establish guidelines on the effect of disposal of pollutants on human health and welfare, on marine life, and on recreational and economic values, as well as guidelines for determining the persistence of the pollutants and other possible locations for its disposal (§ 403(c)(1)). Section 403(c)(2) states that

> "where insufficent information exists on any proposed discharge to make a reasonable judgment on any of the guidelines established pursuant to this subsection no permit shall be issued * * *."

Thus, this section conditions issuance of NPDES permits for discharges into the territorial sea, contiguous zone and oceans on compliance with EPA regulations (guidance)

for assessing the likely resultant degradation of such waters. No permits are to be issued where insufficient information to make such a determination is available. The net effect of section 403 has been to unnecessarily delay offshore oil and gas exploration, while serving no useful purpose to the environment.

3. Automatic Penalty for Oil and Hazardous Substances

Section 311 of the Clean Water Act establishes the basic scheme for the imposition of penalties against those who discharge oil or hazardous substances in violation of the Act. Section 311(b)(6)(A) requires the mandatory imposition of a civil penalty of up to $5,000 against a facility from which a discharge of oil or hazardous substance occurs in violation of section 311(b)(3). In addition, section 311(b)(6)(B) states that the Administrator may commence a civil action for an amount up to $50,000 against any person subject to the penalty above for the discharge of hazardous substances. The section imposes a penalty regardless of whether any harm to the environment has occurred.

4. Restoration or Replacement of Natural Resources

Section 311(f)(4) states that the owner or operator of a vessel or onshore or offshore facility is liable for the expenses incurred by the state or federal government in the restoration or replacement of natural resources as a result of the discharge of oil or a hazardous substance in violation of section 311(b). Section 311(f)(4) does not take into account such factors as species population and the natural ability of the area to recover in figuring the costs for restoration or replacement of natural resources.

5. "Sheen Test"

Section 311 of the Clean Water Act declares that the discharge of harmful quantities of oil and hazardous substances to waters of the United States is generally prohibited, and sets forth reporting requirements, penalties and liabilities for such discharge. By regulation, EPA has determined the amount, in pounds, of each designated hazardous substance, which when spilled must be reported as a violation under section 311. These amounts vary from one pound to 5,000 pounds depending on the toxicity of the substance.

In the case of oil, however, EPA has not established a measurable quantity which is harmful, but has determined

that any discharge which (a) violates applicable water quality standards, or (b) causes a film or sheen upon or discoloration of the surface of the water or adjoining shoreline is harmful and therefore subject to a penalty and liability for cleanup (40 C.F.R. §§ 110.3 and 110.4).

As a result, this "sheen test" definition means that one drop of oil could become a harmful quantity. In fact, any quantity of oil which can be seen on the surface of the water violates the "sheen test" and must be reported.

6. Reporting in Order to Comply with NPDES Permits

Once an NPDES permit is issued to a facility discharging into the waters of the United States, the EPA usually requests monthly reporting of all effluents in addition to annual reports in order to comply with the permit conditions. The frequency and extent of reporting required is determined at the discretion of the individual permitting authority and, therefore, varies widely from facility to facility. Nevertheless, this additional monthly monitoring requirement is extremely burdensome particularly for those facilities subject to minimal reporting requirements.

7. Policy of No Discharge of Oil

Section 311(b)(1) of the Clean Water Act states that "it is the policy of the United States that there is to be no discharge of oil or hazardous substances into or upon the navigable waters of the United States * * *." This policy, like the "zero discharge" goal, has proven impractical and unnecessary in the implementation of the Act's objective.

8. List of Toxic Pollutants and Hazardous Substances

Section 307(a) and section 311(b)(2) of the Clean Water Act authorize the EPA Administrator to develop lists of toxic pollutants and hazardous substances. In addition, the Act provides that EPA should revise the list from time to time, taking into account certain specified criteria. As a result of the statute's vague criteria for classifying pollutants as toxic or hazardous, EPA may in some cases classify pollutants on the basis of incomplete, inaccurate, or inadequately reviewed scientific data.

9. Section 404 Permits for Discharge of Dredged and Fill Material

Section 404 of the Clean Water Act sets forth requirements for U. S. Army Corps of Engineers' issuance of

permits for the discharge of dredged and fill material. This permit program suffers from both confusion over its jurisdictional scope, especially in its application to wetlands, as well as procedural complexities and delays.

10. Extending the Permit Lifetime from Five Years to Ten Years

Section 402 of the Clean Water Act, which sets up the National Pollution Discharge Elimination System (NPDES) permits, specifies in section 402(b)(1)(B) that the maximum lifetime for permits "are for fixed terms not exceeding five years." This five-year life for NPDES permits has proven unreasonable because it is unnecessarily short.

11. BAT Requirements

At the time Congress enacted the 1977 amendments to the Clean Water Act, it was generally believed that the amount of priority pollutants being discharged into the waters of the United States was substantial. Therefore, Congress devised a system of control whereby industrial discharges to the waters of the United States are required to meet increasingly stringent levels of technology-based effluent limitations. Specifically, section 301 of the Act requires those industries that discharge toxic and non-conventional pollutants to achieve by July 1, 1984, Best Available Technology Economically Achievable (BAT) effluent limitations.

12. "Zero Discharge" Goal and Policy

Section 101(a)(1) of the Clean Water Act states: "It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985." This is commonly referred to as the "zero discharge" goal. Similarly, a Clean Water Act policy statement (section 101(a)(6)) provides "that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants . . . ." Congress' intent was not to enforce a literal interpretaion of zero discharge: the legislative history of the Federal Water Pollution Control Act of 1972 states that the zero discharge goal is understood to be a target, not a legally-binding requirement.

EPA, however, has used the zero discharge concept as a forcing provision in the Act to justify increasingly stringent discharge guidelines. For most large refineries, zero discharge is practically unobtainable; in all cases, it is analytically unverifiable. It is also unnecessary for

industry to achieve the zero discharge goal to meet the Clean Water Act's objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (section 101(a)). Yet the EPA continues to promulgate stricter guidelines: for example, many proposed new source guidelines have required zero discharge.

13. Offshore Mobile Drilling Rigs

Section 306(a)(2) of the Clean Water Act establishes the term "new source" for those dischargers who commence construction after the publication of proposed regulations prescribing a standard of performance for that particular discharger. Congress presumably intended that EPA would promptly issue new source performance standards for all significant industrial categories and thus the requirements would be applied with uniformity across industrial lines in all major new plants. Actual experience has been to the contrary. For example, to date, EPA has not promulgated regulations establishing Federal standards of performance for "new sources" in the offshore and coastal oil and gas petroleum industry subject to section 306(n)(1)(B). Until these regulations are published, new mobile drilling rigs will be classified as "new dischargers" under the Consolidated Permit Regulations.

Of particular concern to the petroleum industry are the "new source" and "new discharger" provisions which have the potential for delaying offshore oil and gas exploration and production.

SUBJECT - NPDES REQUIREMENTS FOR INSIGNIFICANT DISCHARGERS OF POLLUTANTS

The Clean Water Act as currently written requires an NPDES permit for every point source discharge of water containing pollutants even if the discharge is of a very small quantity of water containing only minute quantities of extremely benign pollutants. (There is a minor exception under section 402(l) for the return flow from irrigated agriculture.) Although EPA has tried to give some relief by defining certain discharges of uncontaminated storm water runoff to be nonpoint sources not requiring NPDES permits and by providing for general permits for a group of similar discharges in the same geographical area, requiring NPDES permits for insignificant point source discharges and channeled storm water runoff containing insignificant amounts of pollutants continues to impose a great burden on both the discharger and the permit issuing authority without a corresponding benefit to the environment.

PROBLEMS ENCOUNTERED BY CHEVRON WITH SECTION 402

Chevron owns and operates approximately 465 oil-handling facilities (325 bulk plants and 140 terminal facilities) for the distribution of petroleum products. Chevron's terminals are large distribution centers where petroleum products are received by pipeline, marine tanker, barge, or rail car. Storage facilities at terminals vary considerably, depending upon how they receive their products, the market area to be served, and the number of days that storage is needed for the area. Terminals store and redistribute products to petroleum bulk plants, wholesale distributors, fuel oil dealers, service stations, other retailers, and large consumer accounts. Chevron's bulk plants are smaller than marine or pipeline terminals and they receive shipments of petroleum products by truck, either from refineries or terminals. These products are then redistributed by tank trucks to large consumers, homeowners, farms, and service stations.

The operation of these oil-handling facilities is a relatively clean process. For example, those Chevron facilities located near navigable waters are required by law to prepare and implement Spill Prevention Control and Countermeasure Plans (SPCC plans) which establish procedures,

methods and equipment to prevent the spillage of oil into water (40 C.F.R. Part 112). To prevent any spills or leaks from reaching navigable waters, these regulations require there to be diking around the perimeter of the tankyard which forms an impoundment basin. The tankyard impoundment area is designed and operated to retain any oil spill until it is cleaned up, thereby preventing a discharge into the navigable waters. Of course, the ponds which form in the impoundment area must be partially drained during rainy periods to prevent overflow; however, before draining there is an inspection of the retained storm water to ensure it does not violate the "sheen test" or applicable water quality standards. If there is an oil sheen on the surface or the water is otherwise contaminated, it is Chevron's policy not to drain the pond until the contamination is cleaned up. SPCC plans at Chevron's facilities require that all drainages be recorded in a log with the date and time of draining.

Unfortunately, these discharges, however clean they may be, fall within the section 402 NPDES requirement because the storm water is channeled.* Chevron estimates that 100 individual NPDES permit applications will need to be prepared for these oil-handling facilities. The various costs involved in the preparation of these applications are of great concern to Chevron. Under the cumbersome Consolidated Permit application process, several thousand man hours will be required to complete the 13-page EPA Form 3510-1 and the 37-page EPA Form 3510-2C for these facilities. Each facility's waste water will need to be tested for at least eight parameters, including biological oxygen demand, chemical oxygen demand, total organic carbon, total suspended solids and ammonia. Chevron will also be required to determine, at each facility, whether any of 153 substances are present in the effluent, and, at the discretion of the permitting authority, may be required to test for any or all of these substances. Although it is often possible to test a sample for several pollutants at the same time, many pollutants must be tested for individually at a cost of $1,000 per pollutant. Given this application process and the testing requirements, Chevron estimates that the initial cost of applying for 100 NPDES permits for its oil-handling facilities will be substantially in excess of $150,000. Since the permits are only issued for a maximum of five years, additional permit expenses will be incurred when Chevron will be required to repeat the application process.

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* SPCC regulations require those facilities which must implement SPCC plans because of their location near navigable waters to channel storm water discharges.

The costs involved in obtaining permits are only a part of Chevron's total NPDES permit expenses. Once NPDES permits are issued, Chevron will continue to pay a high ongoing cost of self-monitoring and reporting in order to comply with the permit conditions. Although the frequency and extent of reporting required is determined at the discretion of the individual permitting authority and, therefore, varies widely from facility to facility, two examples will illustrate the magnitude of record keeping costs. The facility in Estero, California, subject to one of the harshest reporting requirements, is required to test oil and grease, settleable solids, turbidity and floating particulates weekly and to test suspended solids every two weeks. Additional tests for phenols and zinc must be made once a month. Heavy metal tests are made twice yearly and fish toxicity tests once yearly. The estimated annual compliance cost for this single facility is in excess of $15,000. Chevron's facility in Jacksonville, Florida, which is subject to minimal permit conditions, nonetheless incurs estimated testing and reporting costs of $6,500 annually.

This substantial expenditure does not, however, promote the goals of the Clean Water Act since Chevron's oil-handling facilities are insignificant discharge sources for the following reasons. First, in comparison with most industrial operations requiring NPDES permits, bulk plants and terminals are small operations. Second, the discharge from these facilities is intermittent and is comprised principally of rain water runoff. Third, nearly all of Chevron's oil-handling facilities are equipped with gravity separators which were installed without regard to NPDES permit requirements to avoid wasting oil and to reduce the likelihood of an oil spill. These devices collect the water runoff at the facility and separate the water from any oil which may be present in the runoff. Nearly all tests performed to date show that pollutant discharge levels from these gravity separators, at the time of permit application, have been well within the limits later set by the permitting authority under an NPDES program. Thus, the NPDES permitting process does not affect the operation of the oil-handling facilities, and does not function to improve the quality of the waters of the United States. The process does impose costly testing and reporting requirements and compliance with these requirements merely substantiates Chevron's position that the discharge from these facilities is environmentally innocuous.

Chevron's contention that oil-handling facilities should be exempted from the NPDES permit requirement has been supported by several studies. For example, on October 12, 1976, a final draft report entitled, A Survey of Petroleum

Marketing Terminals was published as prepared under the direction of Task Force W-19, API Department of Environmental Affairs, with the assistance of its contractor, Engineering Science, Inc. (ES), and the cooperation of 15 member companies of the American Petroleum Institute. It presents the results of a survey of the physical and operating characteristics of 76 petroleum marketing terminals and of the oil and grease content in their wastewater discharges. This survey was conducted from January 2, 1975 through April 30, 1975. Using the survey data from these 76 petroleum marketing terminals, a long-term mean effluent oil and grease concentration of 17.5 mg/l was obtained. These results clearly point to the insignificant nature of the discharges from the terminal facilities and the need for an NPDES permit exemption. In addition to marketing facilities, an NPDES permit exemption would also be appropriate for other small facilities with insignificant discharges of pollutants.

Furthermore, not only are Chevron and other oil companies affected by this permit procedure; NPDES permits for insignificant sources also impose a substantial administrative burden on the permit issuing agency. Based on a survey of 39 states, the Association of State and Interstate Water Pollution Control Administrators in May 1979* reported a total of 5,808 major and 36,090 minor NPDES discharge permits had been issued to both industrial and municipal dischargers. The report stated: "About 51% of all permits issued * * * involve relatively insignificant facilities with respect to point source pollution concerns." Moreover, statistics indicate that there are literally thousands of NPDES permit applications (some submitted as long ago as 1972) for small sources that have not yet been acted upon by permit issuing authorities. The reason for the delay is that the permit issuing authorities' primary interest is in permitting significant sources.

As a solution to this problem, EPA officials in some Regions have even suggested that facilities should continue to submit applications for small discharges and storm water runoff, but instead of issuing permits, the EPA will issue a letter stating that no permits are required for these sources. It must be emphasized, however, that this letter issued by the EPA does not protect the facility from the citizen suit provision of Section 505 of the Clean Water Act. The need to comply with the costly permit application procedure is incomprehensible when even the permit issuing authorities sometimes agree that such permits are considered unnecessary.

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* Association of State and Interstate Water Pollution Control Administrators. Recommendations for an Improved National Water Quality Program. Washington, D.C., 1979.

General permits are not a complete solution to Chevron's problem because it has proven difficult to obtain the general permits, and because general permits apply only to a class of similar sources and not to relatively unique sources. For example, it would frequently be appropriate to waive the requirement of an NPDES permit for water use in hydrostatic testing of pipeline. Hydrostatic testing involves pumping water into a segment of the pipeline which then flushes the oil further down the line into a tank. The ends of that segment of pipe are then closed off while pumps raise the pressure in the pipe. The pressure is monitored to check for leaks in the pipe. After the testing, the water is released from the pipe and is discharged into a separator which will remove any small amounts of residual hydrocarbons (oil and grease content). Upon completion of this process the water quality is significantly better than the allowable limitations set forth in NPDES permits. The clean water is then discharged into a receiving water body. Nevertheless, the permit issuing agencies must still be contacted before hydrostatic testing is undertaken to insure the facility's existing permit covers the water discharge or to obtain the necessary permit. As a result there are often lengthy delays before testing of the pipeline can begin.

Another example which illustrates the need for an exemption from the NPDES permit requirement for insignificant dischargers of pollutants involves Chevron's testing of firefighting equipment. At the Perth Amboy refinery, in order to test the equipment for its range, pressure, dispersion pattern, etc. in fighting fires on ships, a mixture of water and protein foam (ie., fish food) was discharged into the water. It was necessary to use the foam rather than plain tap water because water would result in inaccurate performance data. It should be pointed out that even if tap water were used, there would still not be an exemption from the NPDES permit requirement. When Chevron representatives spoke with the EPA concerning the proposed discharge of water and protein foam, the EPA confirmed Chevron's fear that there was no waiver from the NPDES permit requirement available. Nevertheless, if Chevron had proceeded with the equipment testing without first seeking the EPA's consent, then according to the EPA, it would not have prosecuted although the discharge would be technically a violation of the Clean Water Act. Of course, Chevron's policy would not allow such a course of action and, therefore, the testing of the firefighting equipment was delayed.

Since the existing NPDES permit procedure is wasteful and unnecessarily contributes to the high cost of energy without improving water quality, Chevron recommends that the Clean Water Act provide an exemption from the permitting procedure for insignificant point source discharges

and channeled storm water runoff containing insignificant quantities of pollutants.* In addition, the Administrator of the EPA should be authorized to exempt discharges on a case-by-case basis or by classification or category from the NPDES permit procedure. There should be an expedited procedure for the case-by-case exemption.

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* During the first round of NPDES permit issuance (subsequent to the passage of 1972 Act), EPA had excluded storm water discharges containing insignificant quantities of pollutants from NPDES permit requirements. This exclusion was challenged by NRDC who claimed that EPA had no authority under the Clean Water Act to exclude any point source discharges of pollutants. The court agreed with NRDC and as a result the EPA has little or no discretion in its application of the permit program.

SUBJECT - OCEAN DISCHARGE CRITERIA

According to the legislative history of section 403 "Ocean Discharge Criteria," it was originally enacted to keep the oceans, to the extent feasible, in their natural state both for recreational purposes and to exploit the natural resources of the ocean. The section sets forth standards which a discharger must comply with before a permit can be issued for a discharge of pollutants into the territorial sea, the contiguous zone, or the ocean. It also requires the Administrator to establish guidelines on the effect of disposal of pollutants on human health and welfare, on marine life, and on recreational and economic values, as well as guidelines for determining the persistence of the pollutants and other possible locations for its disposal (§ 403(c)(1)). Section 403(c)(2) states that

> "where insufficient information exists on any proposed discharge to make a resonable judgment on any of the guidelines established pursuant to this subsection no permit shall be issued * * *."

Thus, this section conditions issuance of NPDES permits for discharges into the territorial sea, contiguous zone and oceans on compliance with EPA regulations (guidance) for assessing the likely resultant degradation of such waters. No permits are to be issued where insufficient information to make such a determination is available.

PROBLEMS ENCOUNTERED BY CHEVRON

One of the major problems with the implementation of section 403 encountered by Chevron is its redundant and duplicative requirements. Even without section 403, those industries which engage in oil and gas exploration would be required to supply extensive information to the permit-issuing agency in order to obtain an NPDES permit. Prior to the commencement of oil and gas operations at offshore facilities in Federal waters, a detailed Environmental Impact Statement (EIS) must be prepared in connection with the OCS Lease Sale. The preparation of the EIS should provide sufficient information to make a reasonable judgment as to whether oil and gas operations will cause unreasonable degradation of the marine environment. Many coastal states also require the equivalent of the Federal EIS to be prepared prior to a lease sale. For example, in California, proposed offshore facilities must submit an EIR (Environmental Impact Report) as required by the California Environmental Quality Act. In addition, the ocean will receive the protection it needs except in extremely sensitive areas even without section 403 because the EPA, under the NPDES permit program,

has established stringent effluent guidelines for the oil and gas exploration and production point source category. Moreover, the coastal states have established guidelines for preventing the degradation of the ocean waters in the contiguous zone by enacting water quality standards which protect ocean waters.

In light of the safeguards discussed above, section 403 imposes onerous and unnecessary burdens on individual dischargers. Basically, section 403 has been applied to require needless additional duplicative testing and reporting for offshore exploration and production activities. Because of the open-ended nature of section 403, permit writers have been hesitant to issue permits if someone attempting to delay offshore oil and gas operations has raised an environmental concern, no matter how remote. Instead, the permit writers have tended to require additional studies and reports before the permits can be issued even if those studies and reports add only marginally to what is already available. The net effect of section 403 has been to unnecessarily delay Chevron's oil and gas exploration and production, while serving no useful purpose.

In addition to these burdens, EPA will only make its ocean discharge determination as to whether the activity contemplated will result in an unreasonable degradation of the marine environment <u>after</u> Chevron has obtained the OCS Lease although the agency has access to the necessary information, such as the EIS, well in advance of the Sale. This time lag virtually precludes the expeditious and orderly development of OCS Leases as required by the OCS Land Act because there is no specific guarantee as to the time within which the necessary determination of unreasonable degradation must be made under section 403.

This problem is compounded, because, due to the subjective and imprecise nature of this section, there is no way for the bidder on an OCS Lease Sale to tell what requirements will be imposed under section 403 at the time of the Lease Sale. Thus, it is impossible for the bidder to take the potentially burdensome 403 requirements into account when it submits its final bid.

It has become clear after ten years of experience under the Act that the technology-based limitations imposed under NPDES permits do in most cases protect the marine environment; therefore, the additional requirements of section 403 should be imposed only in those unusual situations where the other requirements of the Act will not provide

adequate protection to marine waters. Furthermore, in the case of offshore oil and gas exploration and production activities, the Administrator should be required to specify at the time of the Lease Sale any information necessary under section 403 to issue an NPDES permit. Only where the Administrator determines that the discharge would cause unreasonable degradation of the marine environment should there be a denial of an NPDES permit under section 403.

SUBJECT - AUTOMATIC PENALTY FOR OIL AND HAZARDOUS SUBSTANCE SPILLS

Section 311 of the Clean Water Act establishes the basic scheme for the imposition of penalties against those who discharge oil or hazardous substances in violation of the Act. Section 311(b)(6)(A) requires the mandatory imposition of a civil penalty of up to $5,000 against a facility from which a discharge of oil or hazardous substance occurs in violation of section 311(b)(3). In addition, section 311(b)(6)(B) states that the Administrator may commence a civil action for an amount up to $50,000 against any person subject to the penalty above for the discharge of hazardous substances.

PROBLEMS ENCOUNTERED BY CHEVRON

Section 311 establishes automatic penalties which are not always warranted because such factors as the cause of the discharge or its consequences upon the environment are not considered. For example, under the present statute, if a facility accidentally discharges a quantity of oil such that there is a violation of the "sheen test," that facility would be automatically assessed a stiff civil penalty. Since any quantity of oil spilled on water--even a drop or two--will cause a visible sheen and invoke the penalty, the compliance burden under section 311 is unreasonable. This penalty is imposed regardless of whether the spill was the result of human error, mechanical failure or an act of God. Furthermore, the penalty is not linked with any resulting environmental damage and therefore simply raises the cost of doing business without providing valid benefits to society and the environment.

Although there may have been some justification of this section's presence in the 1972 Act, given the then-unknown effects of these spills upon the environment, this justification is no longer present. It is now clear that the majority of spills have no adverse impact and that nature can frequently absorb spills with little or no trauma:

> "Comprehensive research indicates that oil spills, even those of moderate or major size, have in most instances no more than a negligible impact on the marine ecosystem. Small amounts of oil spilled into bodies of water or flowing streams have not provided evidence of any significant ecological damage."1

For example, a two-year study of marine life in offshore oil production areas of the Gulf of Mexico, the nation's greatest offshore oil producing region and its most productive fishery, conducted by 23 scientists from twelve Gulf Coast universities, concluded:

> "[N]o significant ecosystem changes resulted from petroleum drilling and production; exposure to oil has had no measurable effect on marine life; production of the fisheries has increased markedly 25 or 30 year presence of the oil industry there; and every indication of good ecological health exists."[2]

Oil platforms in the Santa Barbara Channel, where researchers have found a highly complex community of marine life, are now home for 20,000 to 30,000 fish representing at least 30 species. Every available underwater surface of the platforms is heavily encrusted with mussels, barnacles, sea anemones and other forms of marine life.[3] These studies plus many others support our contention that the assessment of arbitrary penalties for spills in the absence of quantified evidence of environmental or other damage is unwarranted. This penalty, unsupported by evidence of damage, can only be viewed as a hidden tax on business and consumers.

This automatic penalty provision also fails to recognize the efforts of industry to minimize spill occurrences. For example, Chevron, through the installation of comprehensive training, operating procedures, and equipment, has reduced the risk of spills at its facilities to the lowest practical level. All new employees working at a Chevron facility are required to complete a training program designed to prevent oil and hazardous substance spills into local waters. Various manuals, including Company rules and regulations as well as various governmental and other agencies' regulations, are kept in each berth for ready access by all personnel. At Chevron's large marine oil transfer facility in the San Francisco Bay, equipment at the terminal is designed to minimize the risk of oil entering the waters. Piping is designed with the minimum number of flanges and valving. Where flanges and valves are necessary, "drip pans" have been installed. These pans collect any small oil drippage that may occur and send it to a common sump system. The wharf is also designed with numerous drains located where oil and rainwater runoff is likely to collect. These drains again are directed to large sumps that are equipped with high level alarms and automatic pumping systems to pump the liquid ashore. The hose handling or loading arm area of each berth is impounded by a raised beam on three sides of a tight curb on the face of the wharf. Equipment at the terminal, such as loading arms and transfer lines, are periodically pressure tested in accordance

with the U.S. Coast Guard regulations. Permanent boom has been installed at various locations under the dock. This permanent boom, along with the 4,400 feet of deployable boom kept on the wharf, is available to readily contain any spillage that might occur. Other equipment, such as a 36-foot Marco Class 1 skimmer, two utility boats for maneuvering boom, ten 12-foot motorized boats, oil absorbent materials, tool trailers and flood lights are maintained in the event of oil spillage. Most of this equipment is used in hypothetical drills at least once a month. Motor operated valves have been installed and emergency shutdown procedures established so that any system can be shut down within 60 seconds. This facility also belongs to an oil spill cooperative which has a complex soil spill Contingency Plan. These accepted good operating practices are typical of the petroleum industry's response to government regulations.

Supporters of section 311 argue that an automatic penalty not linked to any harmful effect upon the environment will discourage such spills. This assumption, however, overlooks several important factors. First, Chevron cannot afford the resulting adverse publicity after a substantial spill even if there were no penalties. Second, it is the goal of every Chevron facility to reduce spills to the absolute minimum. Nevertheless, spills will continue to occur, whether as a result of human error, mechanical failure, or an act of God. Section 311(b)(6), however, refuses to recognize these factors and automatically assesses a fine for discharges in violation of section 311(b)(3) regardless of whether damages result.

In order to correct the punitive effect of section 311(b)(6), Chevron recommends that the focus of the section not be on the fact that a spill has occurred, but rather on the harm resulting from the spill. Amending section 311 to require a showing of environmental or other harm before any penalty is assessed will still provide adequate protection to the environment. Furthermore, it will not impair the facility's obligation to clean up the spill or its potential liability arising from a suit initiated pursuant to subsections 311 f(1), (2) and (3). If, however, there is no evidence of environmental or other damage, then no penalty should be assessed.

1. "It is Time to Redefine a Harmful Quantity of Oil," Paper 155 by H. J. Blevins and W. R. Leek of Chevron U.S.A. Inc., 1971 Oil Spill Conference.

2. The Offshore Ecology Investigation, undated.

3. W. Bascom et al., 1976; and R. A. Simpson, 1977.

SUBJECT - RESTORATION OR REPLACEMENT
OF NATURAL RESOURCES

Section 311(f)(4) states that the owner or operator of a vessel or onshore or offshore facility is liable for the expenses incurred by the state or Federal government in the restoration or replacement of natural resources as a result of the discharge of oil or a hazardous substance in violation of section 311(b). Section 311(f)(4) does not take into account such factors as species population and the natural ability of the area to recover in figuring the costs for restoration or replacement of natural resources.

PROBLEMS ENCOUNTERED BY CHEVRON

Chevron recognizes the validity of government efforts to recover financial or natural resource losses resulting from spills of oil or hazardous substances, but measures which simply raise the cost of doing business without providing valid benefits to society and the environment are unwarranted.

In the event damages are incurred as the result of a discharge of oil or hazardous substances in violation of Section 311(b)(3), the one responsible for such a spill should pay the actual costs associated with cleanup and the restoration or replacement of damaged natural resources, as well as other actual damages. However, assessment of damage to natural resources should be based upon the natural ability of the area to recover. Thus, compensation for damages to an ecosystem should be predicated only to the extent which the ecosystem will not recover in some reasonable time through natural regenerative processes. The time frame should remain flexible to be decided on a case-by-case basis taking into consideration the area's condition prior to the spill, its economic value, the quantity and quality of marine life, and various other factors. Furthermore, damage assessment should be based upon protocols aimed theoretically at restoring the ecosystem to its state prior to impact by the spill and not to any more pristine conditions.

Unfortunately, Section 311(f)(4) permits the use of arbitrary schemes which do not consider the above factors or the natural ability of the environment to recover. Substantial economic costs to industry can result from natural resource damage assessments flowing from Section 311(f)(4) which are based upon simplistic schemes, such as numbers of organisms killed or amount of oil spilled. One outstanding example of the potential impact of a simplified

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scheme for the assessment of damage to natural resources is the case of the grounding of the tanker M/V Zoe Colocotroni in 1973 in southwestern Puerto Rico.[1] In an attempt to free the vessel, 1.5 million gallons of medium crude oil were pumped over the side of the vessel. The district judge assessed damages to mangrove and beach areas at over $5.5 million, based upon his calculation of 92,109,720 marine animals destroyed at a cost of $0.06 per animal. An additional $550,000 was fined for pollution damage to twenty-three acres of mangrove swamp.

In spite of the initial damage, a three-year study performed of the hydrocarbon residues in the sediments of the oil spill site revealed a "very rapid rate of degradation of petroleum * * * in the highly organic mangrove swamp sediments at the spill site. The study also showed that the tropical mangrove sediments studies normally contain significant concentrations of fats, oils, waxes and hydrocarbons from plant, animal and microbial sources."[2] Although the Zoe decision was later overturned on appeal, its economic potential remains evident.

Another example which illustrates the importance of considering the natural ability of the area to recover is the 1971 San Francisco oil spill. According to the study "The Five-Year Recruitment of Marine Life After the 1971 San Francisco Oil Spill"[3]:

> "On January 18, 1971, two Standard Oil tankers collided underneath the Golden Gate Bridge, releasing about 840,000 gallons of Bunker C fuel. An estimated 4.2 million to 7.5 million intertidal invertebrates, chiefly barnacles, were smothered by the oil. Five-year observations of marine life recruitment following the spill indicate that population densities of some marine species have significantly increased in the San Francisco Bay area intertidal zones at Sausalito and Duxbury Reef. With some fluctuations, the barnacles Balanus glandula and Chthamalus dalli have increased from July 1971 to May 1976--from 93 to 189 barnacles per dm2 at Sausalito and from 9 to 34 per dm2 at Duxbury Reef. The large bed of mussels, Mytilus californianus, showed a steady rise from 5.9/dm2 in April 1971 to 14.0/dm2 in July 1976. The density of mobile organisms, such as limpets, snails, crabs and starfish, all show cyclical variations; some show an overall increase. The limpets, Collisella spp., which suffered high mortality during the spill have increased threefold over pre-oil counts.

> "In 1975, some significantly low sample means were recorded for barnacles in Sausalito and for 18 composite species at Duxbury Reef, probably due to natural ecological forces. The five-year recruitment (1971-1976), however, shows no evidence of lasting detrimental effects of Bunker C oil on the populations of marine life within the transect sites."

These studies cited, plus many others, illustrate the dangers of arbitrary schemes for the assessment of damage to natural resources and the importance of taking into account the regenerative ability of the environment for any penalty assessed.

Millions of dollars have been spent by Chevron to prevent spills of oil and hazardous substances and to respond promptly and effectively if one does occur. Much improvement has occurred since the early 1970's, but continued application of outdated penalties adds nothing constructive to this effort. Furthermore, the continuous flow of unproductive paper work resulting from the penalties of Section 311 adds to the costs borne by government, industry and, ultimately, the taxpaying consumer. Amending Section 311 to require a showing of environmertal harm before any penalty for spills of oil or hazardous substances is assessed and to require consideration of the restorative powers to nature in assessing any penalty would shift the approach of Section 311 from punishment for punishment's sake to a responsible and fair system for the allocation of damages resulting from spills.

References

1. Commonwealth of Puerto Rico v. SS Zoe Colocotroni, 456 F.Supp. 1327 (D.P.R. 1978).

2. "Weathering of Petroleum Under Tropical Conditions," David S. Page, J. F. Cooley, J. R. Hotham, and Edward S. Gilfillan of Bowdoin College, Marine Research Laboratory, p. 1.

3. Gordon L. Chan, 1977 Oil Spill Conference (Prevention, Behavior, Control, Cleanup).

SUBJECT - "SHEEN TEST"

Section 311 of the Clean Water Act declares that the discharge of harmful quantities of oil and hazardous substances to waters of the United States is generally prohibited, and sets forth reporting requirements, penalties and liabilities for such discharge. By regulation, EPA has determined the amount, in pounds, of each designated hazardous substance, which when spilled must be reported as a violation under section 311. These amounts vary from one pound to 5,000 pounds depending on the toxicity of the substance.

In the case of oil, however, EPA has not established a measurable quantity which is harmful, but has determined that any discharge which (a) violates applicable water quality standards, or (b) causes a film or sheen upon or discoloration of the surface of the water or adjoining shoreline is harmful and therefore subject to a penalty and liability for cleanup (40 C.F.R. §§ 110.3 and 110.4).

As a result, this "sheen test" definition means that one drop of oil could become a harmful quantity. In fact, any quantity of oil which can be seen on the surface of the water violates the "sheen test" and must be reported.

PROBLEMS ENCOUNTERED BY CHEVRON

In the early 1970s, a lack of information about the effects of oil on the marine environment prompted the administrative decision to publish the very stringent definition of a harmful quantity of oil. Since 1972, considerable research has been conducted by government agencies, academia and industry to determine the effect of oil in the marine environment.[1] This comprehensive research indicates that oil spills, even those of moderate or major size, have in most instances no more than a negligible impact on the marine ecosystem. Small amounts of oil spilled into bodies of water or flowing streams have not resulted in any significant ecological damage. When marine life has been exposed to chronic, low levels of oil, little or no adverse effect has been observed.

For example, a two-year study of marine life in offshore oil production areas of the Gulf of Mexico, the nation's greatest offshore oil producing region and its most productive fishery, conducted by 23 scientists from twelve Gulf Coast universities, concluded:

> "[N]o significant ecosystem changes resulted from petroleum drilling and production; exposure to oil has had no measurable effect on marine life; production of the fisheries has increased markedly during the 25 or 30 year presence of the oil industry there; and every indication of good ecological health exists."[2]

Oil platforms in the Santa Barbara Channel, where researchers have found a highly complex community of marine life, are now home for 20,000 to 30,000 fish representing at least 30 species. Every available underwater surface of the platforms is heavily encrusted with mussels, barnacles, sea anemones and other forms of marine life.[3] These studies plus many others done during the past ten years have demonstrated that oil spills of less than one barrel have little or no impact in many water bodies.

Not only is the "sheen test" overly burdensome and unnecessary for the protection of the environment, but in addition massive paper work is generated by both Chevron and the government even when miniscule amounts of oil are spilled. In 1980, 7,877 oil spills from all industries were reported to the National Response Center. Approximately 64 per cent of these spills were of less than one barrel (42 gallons), which accounted for less than one per cent of the total oil spills in 1980 (U.S. Coast Guard, "Polluting Incidents In and Around U.S. Waters," 1979-1980).

Chevron estimates that by modifying the "sheen test" to a more realistic definition, the Company could cut down its paper work on this matter 90 per cent. This paperwork burden could be eliminated with no significant adverse impact on the environment, thereby freeing employees to deal with more significant problems relating to oil spills.

Chevron has spent millions of dollars to prevent oil spills and to respond promptly and effectively when one does occur. Much improvement has taken place since the early 1970s. It is time for the Federal government to recognize these positive results by establishing a more realistic definition of a harmful quantity of oil and realistically modifying reporting procedures. Chevron recommends changing the "sheen test" to a test based on the lesser of (a) a quantity of oil that violates applicable water quality standards or (b) a quantity of oil <u>in excess of one barrel</u> that causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. The only substantive change suggested in this amendment is the exclusion of spills of less than 42 gallons that do not violate applicable water quality standards.

References

1. See, e.g., The Control of Oil Pollution on the Sea and Inland Waters, ed. J. Wardley-Smith, Graham & Trotman Ltd.; Fish, Wildlife and Oil, The Environmental Impact of an Offshore Oil Spill, Submitted by Environment and Biology Standing Committee Gulf of Alaska Operators Committee; "It is Time to Redefine a Harmful Quantity of Oil," Paper 155 by J. J. Blevins and W. R. Leek, 1981 Oil Spill Conference.

2. "It is Time to Redefine a Harmful Quantity of Oil," Paper 155 by H. J. Blevins and W. R. Leek, 1981 Oil Spill Conference.

3. Id.

SUBJECT - REPORTING IN ORDER TO
COMPLY WITH NPDES PERMITS

Once an NPDES permit is issued to a facility discharging into the waters of the United States, the EPA usually requests monthly reporting of all effluents in addition to annual reports in order to comply with the permit conditions. The frequency and extent of reporting required is determined at the discretion of the individual permitting authority and, therefore, varies widely from facility to facility. Nevertheless, this additional monthly monitoring requirement is extremely burdensome even on those facilities subject to minimal reporting requirements.

PROBLEMS ENCOUNTERED BY CHEVRON

Although EPA estimates that it takes 1 hour to prepare a monthly report for an individual facility, Chevron has found that this report takes more than 4 hours to prepare per refinery. The monthly reports require extra time to prepare since the high, low and average for each test must be computed.

The monthly reports also generate a great deal of paper for the EPA to handle. For example, the December 1980 report for one of Chevron's refineries contained 37 pages of data and calculations.

The magnitude of record keeping costs is another factor which must be considered. Chevron's facility in Estero, California, a marketing facility with a relatively minor discharge, subject to one of the harshest reporting requirements of any of Chevron's marketing facilities, is required to test oil and grease, settleable solids, turbidity and floating particulates weekly and to test suspended solids every two weeks. Additional tests for phenols and zinc must be made once a month. Heavy metal tests are made twice yearly and fish toxicity tests once yearly. The estimated annual compliance cost for this single facility is in excess of $15,000. Chevron's facility in Jacksonville, Florida, which is subject to minimal permit conditions, nonetheless incurs estimated testing and reporting costs of $6,5000 annually.

Therefore, Chevron recommends that section 402 be amended to discontinue monthly reports unless an effluent parameter is in excess of what is allowed by the NPDES permit. This change would lessen the paperwork burden on industry, yet the EPA could still assure compliance since annual reports and reports of violations would still be required.

SUBJECT - POLICY OF NO DISCHARGE OF OIL

Section 311(b)(1) of the Clean Water Act states that "it is the policy of the United States that there is to be no discharge of oil or hazardous substances into or upon the navigable waters of the United States ***." This policy, like the "zero discharge" goal, has proven impractical and unnecessary in the implementation of the Act's objective.

PROBLEMS ENCOUNTERED BY CHEVRON

Chevron takes all responsible measures to prevent oil and hazardous substance spills. For example, Chevron's large marine oil transfer facility located on San Francisco Bay has established a program which encompasses comprehensive training and operating procedures with practical engineering design, to prevent oil spillage into local waters. This three-year comprehensive training program requires each new employee to complete the course satisfactorily in order to maintain employment and to be promoted. Various manuals, including Company rules and regulations as well as various governmental and other agencies' regulations, are kept in each berth for ready access by all personnel.

Nevertheless, these spills will continue to occur whether as a result of human error, mechanical failure, or an act of God. Because these spills can never be totally eliminated, the policy of section 311(b)(1) does not reflect the reality of the petroleum industry practices.

Therefore, Chevron recommends that section 311(b)(1) be amended to read that "it is the policy of the United States that there be a reduction to the lowest possible practical level of oil or hazardous substances into or upon the navigable waters of the United States * * *."

SUBJECT - LIST OF TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES

Section 307(a) and section 311(b)(2) of the Clean Water Act authorize the EPA Administrator to develop lists of toxic pollutants and hazardous substances. In addition, the Act provides that EPA should revise the list from time to time, taking into account certain specified criteria. As a result of the statute's vague criteria for classifying pollutants as toxic or hazardous, EPA may in some cases classify pollutants on the basis of incomplete, inaccurate, or inadequately reviewed scientific data.

PROBLEMS ENCOUNTERED BY CHEVRON

EPA's determination that a pollutant is toxic or hazardous has a definite impact on Chevron's operations. For example, classifying a pollutant as toxic or hazardous may require a facility to install costly technology or may impose more stringent monitoring requirements. Although Chevron does not object to these controls where necessary, EPA should refrain from arbitrarily classifying pollutants on the basis of insufficient evidence.

To remedy this situation, section 307(a) and section 311(b)(2) should be amended to require EPA to base its classification of a pollutant as toxic or hazardous on substantial evidence that has been reviewed by an independent board of qualified individuals, and that supports a finding that a significant and unreasonable risk of exposure exists.

An independent evaluation of scientific data is particularly necessary where, as in the case of much data in this area, the data are incomplete and subject to different interpretations. There is always the danger that such data will be used to support a preconceived notion, rather than being evaluated objectively. In performing its functions under sections 307 and 311 of the Act, EPA should prepare and publish a critical evaluation of the relevancy, quality and accuracy of all scientific data, studies and analyses on which it relies. Contrary data should also be examined. These data, together with EPA's evaluation, should then be reviewed by an independent science advisory board. The board should not be appointed by EPA. The board's mandate would be solely to review and analyze the data used as the basis for EPA's decisions and EPA's evaluation of the data. It would not review the regulatory decisions themselves, since such decisions would involve social and economic considerations outside the scope of the board's expertise.

In its review of the data and EPA's analyses of the data, the board should point out those areas in which the data or analyses are inadequate or need to be revised. In proposing a new or revised decision, EPA should be required to justify any failure to follow or respond to the review board's recommendations.

SUBJECT - SECTION 404 PERMITS FOR
DISCHARGE OF DREDGED OR FILL MATERIAL

Section 404 of the Clean Water Act sets forth requirements for U.S. Army Corps of Engineers' issuance of permits for the discharge of dredged or fill material into the waters of the United States or adjacent wetlands. Permits may be individual permits authorizing a single specified discharge, or general permits authorizing specified types of discharges in a specified waterway or group of waterways. Basically, a Corps permit is required if there is a plan to locate a structure, excavate, or discharge dredged or fill material into the waters of the United States or a plan to transport dredged material for the purpose of dumping into ocean waters. This permit program suffers from confusion over its jurisdictional scope, especially in its application to wetlands, as well as procedural complexities and delays.

PROBLEMS ENCOUNTERED BY CHEVRON

One of the major problems with the section 404 permit process is the delay which occurs in the permit review process. After an applicant submits the Engineer Form 4345 to the COE District Office, the review process begins. Public notice of the proposed activity is issued, followed by the normal 30 day comment period. During the comment period, the application is reviewed by the Corps and other interested agencies, organizations and individuals. Public hearings may also be held. If there are no objections to the structure or activity, a permit will usually be issued within 60 to 90 days after the completed application is received. If, however, there are major objections or if an Environmental Impact Statement (EIS) is required, processing time could be a year or more. Of the 404 permits for which Chevron has applied since mid-1978, 65% took longer than 90 days from the filing of the application to final decision. In addition to this delay, there is also the time spent in pre-application consultations with the Corps and other agencies.

There are several reasons why section 404 permits have taken longer than 90 days to issue. For example, agencies and permit applicants are often confused over whether certain areas for proposed projects are in wetlands subject to the Corps' jurisdiction. In several cases, Chevron has been unable to determine whether an area of proposed activity is a wetland under the regulations. We have had to spend considerable time and money either waiting for the Corps to make the necessary determination or to do extensive scientific studies ourselves to provide the Corps with data to make that determination.

Another reason for the delay in section 404 issuance is that the Corps will often extend the time, frequently with little or no documented justification, that it allows other agencies to comment on permit applications. The Corps has also accepted objections and proposed permit stipulations from other agencies, again with little or no documented justification, thereby forcing Chevron to negotiate conflicting or unreasonable proposed permit stipulations directly with those other agencies. The result is the imposition of location, operation, and wetland mitigation or restoration requirements on the activity proposed to be permitted. These requirements have often forced Chevron into relocating or redesigning the project, with associated delays and expense. Clearly, permit delays can have a significant impact on the cost of our activities, especially where they result in idle contractors or equipment.

In addition to these problems, Alaska presents special difficulties for the Company because the Corps has exerted 404 jurisdiction over such an extensive area of the state.

In order to significantly improve the section 404 program without impairing its ability to achieve its purpose of protecting water quality, Chevron recommends the following revisions which address both the special problems Chevron has experienced with the program, as well as the broader range of problems which industry and others have encountered.

Section 404 should be amended to provide more certainty and predictability in the program by clarifying Congressional intent regarding the application of the 404 program to wetlands, especially those not connected in any way with traditionally navigable waters. This revision could be accomplished by narrowing the Corps' 404 jurisdiction to traditionally navigable waters. The permit process itself could be expedited by imposing clear deadlines on time periods for issuing permits; requiring the Corps to act as a true lead agency in enforcing time limits, adopting permit stipulations, and deciding interagency disputes; limiting the levels and time for permit review and appeal through the interagency Memoranda of Agreement process; and prohibiting other agencies from using the 404 permit process to impose permit conditions for which they do not have explicit legal authority or which have not been adequately documented and justified. To avoid duplication with other federal and state environmental requirements (such as state Coastal Zone Management Programs), the Corps should be required to incorporate environmental reviews done by other agencies and to issue general permits for activities adequately covered by those reviews. The federal role in wetlands

protection should be decreased and the states' role augmented by making requirements for approval of state wetlands protection programs more realistic and flexible, less complicated and burdensome. The use of general permits should be expanded, especially on a statewide and regional basis. Both the criteria and guidelines, which are used in implementing the section 404 program and in specific permit issuance decisions, should specifically incorporate greater recognition of economic values associated with proposed discharges.

Although Chevron recognizes that many of these recommended changes can be implemented by the Corps administratively, a clear expression of Congressional intent is both necessary and desirable for the stability, consistency and effectiveness of the necessary changes.

ALAN CRANSTON
CALIFORNIA

United States Senate
WASHINGTON, D.C. 20510

August 4, 1982

Honorable John Chafee
Chairman, Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear John,

Enclosed is a statement by Sol Mosher, Vice President of the Crown Zellerbach Corporation, which I would appreciate your including in the Subcommittee on Environmental Pollution's hearing record on amendments to the Federal Water Pollution Control Act. For your information, Crown Simpson and Louisiana Pacific whom Mr. Mosher represents are seeking relief from the requirement that the companies install best available technology (BAT) to handle their wastewater discharges at their two pulp mills near Eureka, California.

In 1977 the California Water Resources Control Board granted variances from the secondary treatment requirement to Crown Simpson and Louisiana Pacific for their pulp and paper mills on the Samoa Peninsula, permitting the companies to continue to discharge their effluent into deep ocean waters. The mills do not discharge any toxic materials and secondary treatment is needed only to meet effluent standards for biological oxygen demand and acidity. The Environmental Protection Agency, however, disallowed the variances and the courts have subsequently ruled that the existing law does not permit EPA to grant waivers from BAT for industrial discharges.

I believe these two timber companies have made an excellent case for relief in that upgrading to best available technology at this time would provide no significant environmental benefit at the Samoa Peninsula location. In fact there are environmental objections to the installation of secondary treatment facilities at this site. I hope that you will carefully review the enclosed statement, John, and if you feel as I do that legislative relief is warranted in this specific situation, I would be happy to work with you on language which would give the State of California the authority to reissue the variances in this case.

Sincerely,

Alan Cranston

Enclosure

I. INTRODUCTION

Mr. Chairman I am Sol Mosher, Vice President Federal Affairs, Crown Zellerbach Corporation. This statement is offered on behalf of Louisiana Pacific Corporation and Crown Simpson Pulp Company which operate nearly identical market bleached kraft pulp mills located one mile apart on a spit of land between the Pacific Ocean and Humboldt Bay, just west of the northern California town of Eureka. As further background, Crown Zellerbach Corporation and the Simpson Timber Company each own 50% of Crown Simpson Pulp Company, which in turn operates one of the two mills.

We seek the Committee's assistance in resolving a dilemma in which all affected parties; including those who often have diverse views on environmental issues, agree on the need for a variance from secondary treatment for these two mills under carefully prescribed conditions. Because of the Administrative and Court history of this issue, we believe the problem needs to be resolved by a change in existing law. We further believe that an amendment can and should be drafted so that its practical effect is limited to this particular situation.

Unfortunately, the law as currently written apparently cannot be responsive to the unique environmental characteristics associated with this specific site. Both companies sought unsuccessfully to reverse a controversial ruling made by EPA in September, 1977 which vetoed a variance that had been unanimously granted by both the Regional and California State Water Resources Control Boards, which as this committee knows, do not have a reputation for "being soft" on environmental issues. The state boards agreed with the two companies that the installation of BPT technology would not result in water quality benefits, and might result in other, more serious environmental impacts.

At issue is the process which the two nearly identical plants use to discharge primary treated, non-toxic wastes, 2500 feet out into deep ocean where they are then dispersed harmlessly by the well-buffered oxygen-rich ocean. That discharge system was installed at considerable expense to meet state concerns about environmental effects of discharge closer to shore. Over six million dollars have been spent, since mill startup, on water pollution control at the Crown Simpson mill alone.

There is agreement among environmental organizations familiar with the situation of these two mills that the treatment "cure" will be environmentally degrading. It may surprise the Committee to know that the search for a variance from secondary treatment at these facilities is supported by environmental organizations including the Sierra Club (Redwood Chapter, North Group) and the Northcoast Environmental Center, a coalition of twelve environmental organizations, (both of Arcata, California); by the Board of Supervisors of Humboldt County, by the Humboldt Bay Municipal Water Districts, and many other organizations.

Unless the law can be put back in touch with economic and environmental reality, the two companies face additional costly expenditures of between 17 and 20 million dollars, at a time of great distress in an area already beset with 15-20 percent unemployment to meet a non-existing problem, that will result in a setback to the local environment.

No competitive advantage would result from the relief sought inasmuch as the companies have already made considerable investments in their effluent systems.

II. BACKGROUND

As previously stated, the ocean outfalls were installed years ago, in consultation with California State agencies, at costs of millions of dollars to minimize environmental effects. The combination of (1) these long outfalls and their diffusers, (2) the turbulent characteristics of the Pacific Ocean in the area of discharge, and (3) the treatment now given the mill's effluent, results in discharges that do no harm to the environment.

A. STATE OF CALIFORNIA FOUND NO BENEFIT TO SECONDARY TREATMENT

In December, 1974, pursuant to the 1972 Federal Water Pollution Control Act, the Companies began a long and arduous course of administrative proceedings before State agencies charged with administration of that act. We attempted to secure a permit to discharge (NPDES permit). Following hearings before both the Regional Board and the State Board, both Boards unanimously granted variances from EPA effluent limitations for BOD and pH. (BOD is a measure of the reduction in available oxygen resulting from decomposition of organic material, and pH is a measure of acidity or alkalinity...both are non-toxic pollutants).

While the State Board found that it would be environmentally counter-productive to impose the EPA's BOD and pH limits, it did impose stringent and costly limitations (including the EPA's suggested limitations for total suspended solids, and numerous state requirements including control of grease and oil, foam, color and the discharge of heavy metals.

The requirements imposed upon the Companies by the State agencies were stringent. They have been met by costs in the hundreds of thousands of dollars. However, installation of a secondary treatment facility necessary to meet EPA's BOD limits would cost millions of dollars, and require hundreds of thousands of dollars to operate. These costs have escalated since the State Board's findings were made in 1977.

B. SECONDARY TREATMENT WOULD RESULT IN SEVERE ENVIRONMENTAL & ENERGY COSTS

The cost of compliance with EPA's BOD requirements is not only a dollar cost, but also an environmental cost. Secondary treatment facilities would lead to odor and other air pollution effects, difficulties with state coastal conservation efforts, and extremely difficult sludge disposal problems.

Substantial non-water quality environmental impacts would also result directly from the operation of secondary treatment facilities. The record before the State Board showed that secondary treatment facilities for these two plants would consume:

8640 tons per year of caustic soda,
900 tons per year of anydrous ammonia,
670 tons per year of phosphoric acid.

The energy impacts of installing and operating secondary treatment facilities are also severe. The total power use, including operation of activated sludge plants, and production of chemicals would be 38,800,000 KWH per year. Two such facilities thus would consume approximately 39 million KWH of electricity per year for operation, and would require almost 60,000 barrels of oil a year to produce the needed electric power.

Additionally, there will be significant air pollution produced in connection with producing power necessary to operate such secondary treatment. This includes approximately:

200,000 pounds per year of oxides of oxygen,
377,000 pounds per year of sulphur dioxide,
20,356 pounds per year of particulate matter, and
1,344 pounds per year of sulfur trioxide.

The companies' uncontroverted factual evidence was aptly summarized by the State Board in its order granting the requested variances. After discussing the magnitude of the environmental costs, including the chemicals required for compliance, the direct and indirect power requirements, and the potential sludge disposal problems, the State Board said:

> "On the other hand, as previously discussed, the dischargers have shown there is no expected environmental benefit to be gained by installation of the treatment facilities necessary to comply with the BOD and pH limitations."

C. EPA VETOED THE STATE PERMIT AND WAS UPHELD BY THE COURTS

The EPA Administrator did not approve the State granted variances on Sept. 15, 1977 and the veto was appealed to the courts. On April 20, 1981 the Court of Appeals for the Ninth Circuit upheld the EPA Administrator's denial of the variances. The issue was decided, not on the basis of the substantive merits, but as a result of the law's inflexibility. The court held that the State Board erred in proposing a variance for reasons relating to receiving water quality, saying:

> "Above all the Act seeks to avoid imposing on the Administrator any requirement...to ascertain water quality impact of effluent controls..."

However, the express intent of Section 304(b)(1)B of the Act is for consideration to be given in setting effluent limitations to the cost in relation to the benefits to be achieved, taking into account such factors as non-water quality environmental impact, including energy requirements. Congress has already corrected this "Catch 22" situation, but only for publicly-owned treatment works, by providing in Section 301(h) (added by the 1977 amendments) that the Administrator may modify the effluent limitation requirements for discharges from publicly-owned treatment works into marine water under certain conditions. That amendment was amply supported by data indicating no harm from such discharges into marine waters. The discharges of these two pulp mills meet all such conditions but that Section does not apply to them since theyare not - publicly-owned treatment works; in fact, their effluent pollutants are greatly exceeded by many municipal dischargers.

III. THERE IS NOW SUBSTANTIAL LOCAL OPPOSITION TO INSTALLING SECONDARY TREATMENT

A. SUPPORT FROM LOCAL GOVERNMENT AGENCIES

As local governing bodies including the Board of Supervisors of Humboldt County, and the Humboldt Bay Municipal Water District examined the situation, it became more and more apparent that installation of secondary treatment at these facilities not only would be very costly to implement, but "would result in no significant improvement in the receiving water quality, and would cause net adverse energy and environmental impact."

The Humboldt County Board of Supervisors went on to say that "Adverse environmental impacts associated with the required effluent treatment plant process and siting locations, raise coastal and air quality issues. Added to this is an enormous waste of energy."

B. SUPPORT FROM LOCAL ENVIRONMENTAL ORGANIZATIONS

Local environmental organizations were invited to look at the facts and offer their own assessment. Without exception, they have agreed that it made neither environmental nor economic sense to require secondary treatment at these two plant sites. As recently as July 12, 1982, the Redwood Chapter, North Group of the Sierra Club urged EPA to again consider the issuance of a variance for LP and Crown Simpson "in order that these Companies may continue to ocean discharge."

The Sierra Club pointed out:

> "The narrow peninsula separating the ocean from Humboldt Bay is a particularly fragile and rare environment. Much of the area has already been heavily impacted by industrial and residential development, off-road vehicle use, and other public activities. That makes the remaining open-space areas of special importance as habitat for native plants, birds and small mammals. Included in this are several wetlands."
>
> "We are concerned that the required secondary treatment will have serious impacts on this remaining dune-wetland area. The lagoon and associated facilities will destroy a number of acres

of this limited environment. In addition, significant air pollution problems are anticipated."

"...we have serious reservations about the wisdom of trading the present system for something that appears to be more damaging to the environment. We respectfully ask that EPA again consider the issuance of a variance for LP and Crown Simpson in order that these companies may continue ocean discharge..."

The Northcoast Environmental Center, in a press release dated June 30, 1982 said:

"We haven't seen any evidence that installation of the secondary treatment facilities would have any net benefit for the environment...in fact, the operation of the treatment facilites would probably worsen the already polluted air in the Eureka vicinity..."

"The 1972 Act require that facilities with ocean outfalls must treat their discharges with the "Best Available Technology" but in this case the BAT would amount to more air pollution, large amounts of sludge to dispose of, possible loss of sensitive habitat areas and the consumption of a large amount of energy..."

Two points should be made with regard to the excerpts I have just read. While, as I stated earlier there is unanimity among diverse organizations as to the objective, there are differences of opinion as to how to get there.

First, some environmental organizations obviously would prefer dministrative remedies. Unfortunately, both companies have pursued that route without success. EPA has rejected our request to reopen the Administrative record on this matter, not necessarily taking issue with our arguments but citing the clear court history. We believe the present Act can be strengthened by an amendment which is limited to the unique situation we have described.

Secondly, as a matter of simple equity we are asking for less, under the circumstances than Congress granted last year for many ocean discharging municipalities.

IV SUMMARY

The merit of our request is best summarized by an editorial entitled "COSTLY & USELESS" which appeared in the June 13th issue of the Eureka, California Times Standard:

"The 30 million dollar price tag is staggering and will translate into an estimated additional $10 per ton for processed pulp. Company officials indicate that will make their product less competitive in an already crowded marketplace. With hundreds of local families presently feeling the pain of plant shutdowns, further financial setbacks can only aggravate the hardships.

"Aside from the economic disadvantages, the secondary treatment operation carries its own environmental blemishes, including air and odor pollution near the treatment ponds, sludge disposal problems at the site, and hefty quantities of additional energy consumption. The latter would lead to further air pollutants through power plant emissions.

"All this would be done for the questionable purpose of mitigating the unproven negative impact the plant presently has on the ocean environment. It amounts to pure bureaucratic folly..."

"Without such action (relief from secondary treatment) one (actually two) of our area's chief employers faces obstacles that are certain to be rippled down through an already beleaguered work force."

As many members of this Committee know, I served as head of Legislative Affairs for many years at two major departments of government, Commerce and HUD. In all those years of legislative struggle, I do not recall any issue where the arguments for relief were so compelling and the support of otherwise diverse interests so uniform.

I have attached for the record communications from the Humboldt County Board of Supervisors, the Humboldt Bay Water District, and the editorial from the Eureka Times Standard.

I urge the Committee to consider the merits of our request for enactment of an amendment to the Federal Water Pollution Control Act which would address this specific and unique problem without affecting or otherwise diminishing the basic goals of the Clean Water Act.

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Gulf Oil Corporation
PUBLIC AFFAIRS DEPARTMENT

Charlotte Rush
DIRECTOR
FEDERAL RELATIONS

Suite 700
1025 Connecticut Ave., N.W.
Washington, D.C. 20036

September 3, 1982

The Honorable John H. Chafee
Chairman
Senate Environment and Public Works
Subcommittee on Environmental Pollution
4204 Dirksen Senate Office Building
Washington, D.C. 20510

Re: S. 2652, The Clean Water Act Reauthorization Bill

Dear Mr. Chairman:

Gulf appreciates this opportunity to comment on the Congressional Reauthorization of the Clean Water Act. Since 1972 when amendments to the Federal Water Pollution Act (now called the Clean Water Act) where passed, industry has spent $18 billion complying with federal waste water treatment technology requirements. The results have been better than expected.

The United States Environmental Protection Agency estimates that 94% of industries now have met effluent limits called Best Practicable Technology (BPT) and says that this compliance rate translates into a tremendous reduction in discharges of pollutants when compared to earlier decades.

As you know, industry is required to install the next level of treatment, Best Available Techonology (BAT), by 1984 for treatment of those toxics the Environmental Protection Agency decides to regulate. Your hearings confirmed that there are great differences of opinion over those situations requiring this more expensive treatment. The reasoning is if BPT reduces toxic pollutants in water to a level that will not harm the environment, then is the more expensive BAT really necessary?

Gulf sees a need for establishing a sense of balance between benefits and costs, and encourages you and your colleagues to expand your deliberations to include future legislative proposals which reflect these goals.

I am submitting to you and by a copy to your fellow committee members for the record, Gulf Oil Corporation's position paper on the Clean Water Act 1982 Reauthorization Bill.

Should you have any questions, please call me.

Sincerely,

Charlotte Rush

Attachments
CR/nmy

cc: Members of the Senate Environment and Public Works Subcommittee on Environmental Pollution

CLEAN WATER ACT

GULF POSITION PAPER

The Clean Water Act provides a comprehensive set of rules and regulations which has set us on the course toward clean-up of the nation's waters -- a course that none of us wants to change. The installation of pollution control equipment by industry has substantially relieved environmental stress from industrial wastewater discharges. However, some areas should be considered for revision to improve the efficient administration of the Act without adversely affecting progress toward clean-up of the nation's waters.

Since 1977 when the Act was last revised, we have learned more about the problem, and the prescription. We have learned more about toxic pollutants and their control; more about regulatory mechanisms and their cumbersome aspects; and more about goals (like the zero discharge of pollutants), their relation to the real world, and their possible aggravation of other environmental problems. What we have learned is that Clean Water Act prescriptions can be changed to reduce negative side effects without detracting from the cure.

Regarding toxic pollutants -- which must not be allowed to harm the American people -- the following has been learned:

- The Environmental Protection Agency (EPA) has found that since 1977 the amount of toxic pollutants in most untreated industrial wastewater is less than originally feared. For example, analytical data obtained

by EPA and industry data on petroleum refineries indicate that only a limited number of toxic pollutants are present in refinery raw wastewaters.

- Additionally, the House Subcommittee on Oversight and Review of the Committee on Public Works and Transportation has concluded that it is now known that basic biological treatment technologies -- the kind of technologies installed under Best Practicable Technology (BPT) requirements -- do remove considerable quantities of toxic and other pollutants and in many instances either reduce or eliminate the potential threat of both acute and chronic toxicity to the aquatic environment.

- This conclusion of the Subcommittee was supported by the analytical data obtained by EPA and industry on discharges from petroleum refinery wastewater treatment facilities which are currently satisfying BPT requirements.

- EPA research in the area of site specific water quality criteria indicates that the toxicity of toxic pollutants varies greatly depending both on the characteristics of the pollutants and the physical/chemical characteristics of the receiving water.

These developments prompted the Subcommittee to question whether strict adherence to the Best Available Technology program was the best way to carry out the Clean Water Act's policy of prohibiting toxic discharges. Spokesmen for the EPA have raised similar questions. Some have suggested carefully targeting Best Available Technology (BAT) controls so as to address the bulk of the toxics problems while not forcing the adoption of overly stringent controls.

It is always a challenge to incorporate the lessons of experience and it is a step we must take with the Clean Water Act. For example, the EPA Administrator should be permitted to set BAT requirements equal to BPT where controls beyond BPT would not result in significant additional removal of toxic pollutants. To encourage flexibility while not endangering water quality, modifications to BAT requirements on a permit- by-permit basis should be allowed for toxics where a discharger can demonstrate that they would not violate water quality standards or adversely impact the receiving water. Such modifications are granted for other pollutants.

Since 1977, we have also learned more about what works and does not work in the regulatory sphere. In the case of BAT requirements, we have found that the EPA has not been able to issue effluent limitation guidelines on schedule. Although industry currently must comply with BAT requirements by 1984, most of those requirements have not been promulgated. Industry needs at least three years from the date of promulgation to do the necessary design and construction of newly required control technologies. So, it makes sense to extend the statutory date for compliance -- to July 1, 1988, -- to deal with this regulatory problem.

We have also found unnecessary duplication of regulatory requirements under the Clean Water Act. Unlike other environmental statutes -- for example the Clean Air Act and the Resource Conservation and Recovery Act -- new source permits under the Clean Water Act must also comply with the environmental impact statement procedure of the National Environmental Policy Act. This is duplicative because the new source permit process under the Clean Water Act meets the objectives of an environmental impact statement. Because EPA is the federal agency responsible for the protection of the environment, environmental concerns play a major role in all of its decision-making, including new source permits under the Clean Water

Act. These permits should be exempted from environmental impact statement requirements, just as are new sources under the Clean Air Act, the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and as are existing sources under the Clean Water Act.

Yet another regulatory tangle in the Clean Water Act is the Section 404 Dredge and Fill program. The number of government agencies involved in the granting of a permit, coupled with unclear lines of authority, has caused both delays in securing permits and the imposition of unreasonable requirements. In addition to these bureaucratic problems, the broad scope has unnecessarily hampered the exploration, development and production of oil and gas, coal and numerous minerals. To remedy these problems, Congress should consider redefinition and clarification of EPA, Corps of Engineers and state responsiblities to reduce these impediments while maintaining wetland protection.

Also in need of re-evaluation, in light of new knowledge, is the zero discharge goal of the Act -- the elimination of the discharge of pollutants in navigable waters by 1985. That goal is difficult, if not impossible, to achieve and may not be economically or environmentally sound. Advances in analytical methods enable the detection of minute quantities of materials which could be defined as pollutants, yet have no negative environmental effects. More important, technology available to dischargers to approach the zero discharge goal produces residual wastes which require disposal, possibly causing undue stress on land, air and groundwater resources.

In 1976, the National Commission on Water Quality recommended that "Congress redefine the goal of the elimination of discharge of pollutants by 1985 to stress conservation and reuse of resources while striving to achieve the objective of restoring

and maintaining . . . the chemical, physical and biological integrity of the nation's waters." The Commission concluded that "the methods (of eliminating pollutants) are generally prohibitively expensive, energy intensive, and create large quantities of residuals which must be disposed of in some other way than in water," and that "only minor incremental improvements in water quality characteristics are predicted to occur." The concerns of the Commission were echoed by the General Accounting Office, which has concluded that the 1985 zero discharge goal is "not reasonable and should be eliminated or redefined to stress water conservation and reuse of resources."

These and similar issues raise a question that is central to all of our energy development and environmental protection activities: Are we striking the proper balance among competing needs? As a society, we should not avoid answering these hard questions - by pretending they do not exist. In the case of the Clean Water Act, we would be well advised to review the "zero discharge" goal and either confirm that it represents the proper balance for us to strive toward, or revise it accordingly.

These are Gulf's specific recommendations concerning changes which should be made in the Act:

GOALS

1. While leaving the goal intact, the 1985 date for attaining the elimination of the discharge of pollutants into navigable waters should be extended to 1991, and a study of the goal's feasibility should be undertaken and presented to Congress by 1985.

THE CONTROL OF TOXIC POLLUTANTS

2. Attainment dates for Best Available Technology (BAT) should be extended to July 1, 1988, or three years after promulgation of guidelines for particular categories or classes, whichever is later but in no case later than 1991.

3. BAT effluent limitations should recognize that Best Practicable Technology (BPT) may satisfy the requirements of BAT for some categories where BPT adequately controls the discharge of toxic pollutants. Additionally, the Act should provide for point source modifications of BAT toxics requirements based upon water quality considerations.

THE CONTROL OF CONVENTIONAL POLLUTANTS

4. Attainment dates for Best Conventional Technology (BCT) should be extended to July 1, 1988, or three years after promulgation of guidelines for particular categories or classes, whichever is later but in no case later than 1991.

CRITERIA AND STANDARDS

5. (a) Data used in the development of criteria documents, and the criteria documents themselves, should be more thoroughly substantiated and should be subject to extensive scientific and public review. Current criteria documents should be re-evaluated accordingly. (b) The EPA should be prohibited from enforcing a policy of presumptive applicability of criteria

that makes it easier for states to set standards at or more stringent than corresponding criteria and harder to set standards more relaxed than the corresponding criteria on a particular body of water. EPA's veto power should be limited, thus giving states the freedom to develop water quality standards consistent with long-term state goals.

6. Water quality-based standards beyond technology-based effluent limitations should not be applied to streams having only intermittent natural flow unless there is tangible environmental benefit from additional controls. Limits beyond technology-based effluent limitations should be applied to intermittent streams on a case-by-case basis only when such a benefit is demonstrated.

PROVISIONS IMPACTING ENERGY PRODUCTION

7. (a) In order to be consistent with other environmental legislation, National Pollutant Discharge Elimination System (NPDES) permits for new source discharges should be exempted from the National Environmental Policy Act (NEPA). (b) Also, under the new source provisions of the Act, the term "commencement of construction" as applied to mobile drilling rigs, should be clarified so that it refers to the assembly of the rig itself, rather than the placement of an existing rig at a new site, i.e., a mobile drilling rig should not be considered a new source each time it is relocated.

8. Information gathering requirements pertaining to ocean discharge permits should only require an assessment of information that is "reasonably available" to the the applicant and to the EPA. Furthermore, when the EPA

has all reasonably available information on the effects of a proposed ocean discharge, the decision to issue a permit should involve a balancing of the requirements of the Act.

9. Wetlands protection is essential. However, confusion and complexity in the Act's Section 404 Dredge and Fill program caused by court interpretations of the term "navigable waters" have unduly impeded energy production. In order to reduce these impediments while maintaining wetlands protection:

(a) Navigable waters should be redefined with respect to Section 404 to include those which are used or are susceptible to use in their natural condition or by reasonable improvements as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark including all waters which are subject to the ebb and the flow of the tide shoreward of their mean high water mark.

(b) The Corps of Engineers should have exclusive authority for the implementation of the Section 404 Dredge and Fill program.

(c) All of the waters classified as non-navigable should be subject to state jurisdiction unless the governor of the state, along with the state legislature, requests federal jurisdiction over such non-navigable waters.

PERMITTING AND DEFINITIONS

10. The EPA should have the discretion to exclude de minimus industrial discharges from NPDES requirements upon a finding by the Administrator that health and the environment would not be adversely affected by such an exclusion.

11. Structures and conveyances that prevent contamination of stormwater runoff should be excluded from the definition of point sources and not regulated under the Act.

6300 N. Radcliffe St.
Bristol, PA 19007
July 29, 1982

Environmental Pollution Subcommittee,
Senate Committee on Environment and Public Works
4204 Dirksen Building
Washington, D.C. 20510

Gentlemen:

I thank you for this opportunity to present comments for inclusion in the proceedings on Senate Bill S.2652 in lieu of a personal presentation before your Committee since the schedule was already filled when a request was made to participate in your hearings.

My name is Thomas Iezzi. I am a recent retiree from the chemical industry with over thirty-five years experience as an environmental engineer working principally in the areas of industrial waste management, water quality management and water resources management. Besides working and holding offices in numerous technical committees, associations and studies, I have been technical advisor for the Pollution Control Group, a professional group representing the major municipal and industrial water suppliers, users and dischargers in lower Bucks County located along the Pennsylvania side of the estuary of the Delaware River.

I shall confine my comments to "Dams", beginning on page 25, line 12, and the proposed changes in the related sections.

I am opposed to the proposed changes in their present form for the following reasons: 1) dams do alter the flow regime of streams, rivers and estuaries, and because they do, they can be a major source of organic and inorganic pollution; 2) since no two watershed basins are alike either in their physical or economic development, dams and modes of operation can have much more serious economic and environmental consequences in some basins than in others; 3) the purposes and sizes of dams can cause considerably different economic and environmental impacts well below the dam as well as in the immediate area in a given watershed basin; 4) the adverse environmental impacts caused by dams cannot always be offset by implementation of additional and more stringent regulatory programs either above or below a dam; and 5) the attempt to offset adverse impacts of dams with the aforementioned regulatory programs can be inequitable and could be throttling and damaging to economic development both above and below the dam.

Inherent in all projects is the bitter side as well as the sweet. However, I believe that before proceeding with any project, the sweet should be required to outweigh the bitter side, and that the latter should be mitigated and duly compensated for.

Thus I think it is essential that the proposed changes be deted or amended to include the following considerations:

1. Dams are point sources of pollution.

2. Resource planning and design of dams and their operation shall be done to minimize pollution.

3. Adverse economic and environmental impacts of dams shall be determined and weighed against benefits before proceeding one way or the other in their planning and design.

4. No planned or proposed dam and/or reservoir project shall proceed if the economic development above and below the dam will be throttled or damaged or if the adverse impacts cannot be offset.

5. Regulatory implementation of programs to offset the adverse impact of dams shall be equitably and evenly imposed upon those who benefit from dam and reservoir projects as well as those who are adversely affected by their impacts, and, where the cost is greater to the latter, the former shall provide due compensation.

6. Water is a valuable economic resource, and no water shall be exported to another basin through the construction of a dam or other devices until the water resources of the requesting basin are reasonably developed and sound conservation practices are enforced. Furthermore, the exporting watershed or basin shall be duly compensated for the value of the water, the adverse impacts of the dams or other devices and the economic opportunities foregone.

Rather than go into the details for the basis of my comments, I am attaching hereto a copy and enclosing two additional copies of testimony I presented over ten years ago. I think it will be of great value in the deliberations of your committee and staff members. It concerns the problems of the Delaware River Basin and in particular the proposed Tocks Island dam which would discharge to the estuary that is in itself a dam created by the tidal action of the sea. Proposed operation of the dam to purge the reservoir of accumulated pollution particularly during the springtime could well cause pollution problems within the estuary exceeding by many times the pollution problems caused by the municipal and industrial dischargers along the estuary.

It is only in recent years that much of what you will find in this attachment concerning the signifigant pollution problems in the reservoir and in the estuary has been recognized by Delaware Basin agencies, and of course I am delighted that the problems caused by dams have now come to the attention of the legislative and judicial branches of government.

I hope that the adverse economic problems of dams will be equally recognized and incorporated in the proposed amendments

in the very near future.

Since there is probably more unknown than known about the problems created by dams, I hope, too, that appropriations will be made by the Congress for studies to establish and recognize the existence of these problems, to determine their adverse economic impacts, and to research alternatives for their potential solution or mitigation as well as means of compensation or reparation.

Please call upon me at (215)788-8292 if you have any questions or if I can be of additional service to you.

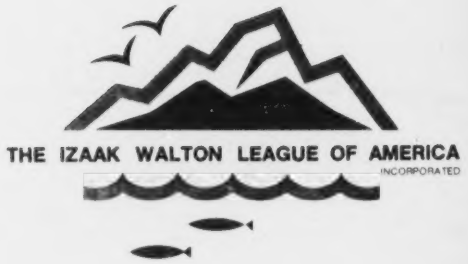
Sincerely,

Thomas Iezzi, P.E.

1 Attachment: Statement by Thomas Iezzi, Sanitary Engineer, for Inclusion in the Record of the October 29, 1971, Hearing on the Proposed Tocks Island Reservoir Project by the [Pennsylvania] Joint Legislative Air and Water Pollution Control and Conservation Committee at Stroudsburg, Pa.

2 Enclosures: 2 copies of this letter, each with above attachment

cc: Pollution Control Group Members



TESTIMONY OF WILLIAM ROULETTE
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON THE CLEAN WATER ACT
JULY 30, 1982

National Office: Suite 806, 1800 N. Kent Street, Arlington, Virginia 22209 • Phone 703-528-1818 • IWLA Hotline 703-522-5848

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MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, IT IS A PLEASURE TO HAVE THE OPPORTUNITY TO TESTIFY BEFORE YOU TODAY ABOUT PROPOSALS TO ALTER THE CLEAN WATER ACT. MY NAME IS BILL ROULETTE. I MAKE MY LIVING AS A COMMERCIAL FISHERMAN ON THE CHESAPEAKE BAY. I HAVE ALSO WORKED ON THE WATER IN MAINE AND CONNECTICUT. AS A MEMBER OF THE IZAAK WALTON LEAGUE OF AMERICA, I AM STATE CHAIRMAN OF THE CHESAPEAKE BAY COMMITTEE. I HAVE BOTH A SURVIVAL MOTIVE AND A CONSERVATION MOTIVE FOR APPEARING HERE TODAY.

CLEAN WATER IS ESSENTIAL TO MY BUSINESS AND TO THE ECONOMY OF MARYLAND. LAST YEAR, THE DOCKSIDE OR WHOLESALE VALUE OF THE 94 MILLION POUNDS OF FISH AND SHELLFISH HARVESTED FROM THE MARYLAND PART OF THE BAY WAS $43 MILLION, WITH A RETAIL VALUE OF 3-5 TIMES THAT AMOUNT. THE BAY IS ALSO THE SINGLE MOST IMPORTANT NURSERY ON THE ATLANTIC FISHERY, AND THE QUALITY OF THE BAY'S WATER DETERMINES THE PRODUCTIVITY OF THIS FISHERY.

DESPITE THE GREAT VALUE OF THIS RESOURCE, WE CONTINUE TO DEGRADE IT. AS A WATERMAN, I HAVE SEEN DRASTIC CHANGES IN THE BAY AND THE WATERS OF THE EAST COAST IN THE PAST 15 YEARS. FOR MANY YEARS, WE WATERMEN HAVE BEEN SAYING THAT THE BAY IS DYING. AND SURE ENOUGH, IN LAST MONDAY'S BALTIMORE SUN, THE SCIENTIFIC COMMUNITY CONFIRMED IT. AS EVIDENCE OF THIS TREND, OUR TOTAL FISH LOADINGS OF THE LAST TEN YEARS FROM THE COASTAL PLAINS AND BAY HAVE STEADILY DECLINED. OYSTER LANDINGS ARE PRACTICALLY NON-EXISTENT FROM THE UPPER CHESAPEAKE BAY (ABOVE THE BAY BRIDGE). WE NO LONGER LAND SHAD, HERRING, OR ROCKFISH IN THE BAY, BECAUSE THERE IS NO SAFE WATER OR HABITAT FOR BIRTHING. AND MANY SPECIES OF ANADROMOUS FISH, SUCH AS STRIPED BASS AND THE BLUEBACK HERRING ARE NO LONGER CAUGHT IN THIS PART OF THE ATLANTIC

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COAST.

THE CLEAN WATER ACT WAS PASSED TO ADDRESS WATER POLLUTION PROBLEMS AND HAS BEEN SOMEWHAT SUCCESSFUL BY REQUIRING THE CLEAN-UP OF SEWAGE FROM THE BAY. ON THE OTHER HAND, THE HEAVY USE OF CHLORINE IN MANY CONVENTIONAL SEWAGE TREATMENT SYSTEMS HAS CAUSED NEW POLLUTION PROBLEMS, WHICH I WILL DISCUSS BELOW. OTHER PERSISTENT POLLUTION PROBLEMS CONTINUE TO PLAGUE THE BAY AND ITS FISHERIES, SUCH AS CONTAMINATION FROM INDUSTRIAL TOXICS, POLLUTION FROM AGRICULTURAL RUN-OFF, AND THE DESTRUCTION OF CRITICAL WETLANDS. ALL OF THESE POLLUTION PROBLEMS HAVE DEGRADED THE BAY'S FISHERIES.

THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) PROPOSALS TO RENEW AND ALTER THE CLEAN WATER ACT, S. 2652, IGNORES SOME OF THESE PROBLEMS AND EXACERBATES OTHERS. THE BILL WOULD SLOW DOWN AND WEAKEN CLEAN-UP REQUIREMENTS FOR INDUSTRIAL TOXICS JUST WHEN STANDARDS FOR MANY OF THE MOST POLLUTING INDUSTRIES ARE ABOUT THE BE ISSUED. AND OTHER PROVISIONS OF THIS BILL WOULD SERIOUSLY HARM COMMERCIAL FISHERIES BY ELIMINATING FEDERAL CONTROLS ON WATER POLLUTION FROM DAMS, AND RELAXING CONTROLS ON THERMAL DISCHARGES, NEW SOURCES OF POLLUTION, AND FEDERAL FACILITIES. TOGETHER, THE PROPOSALS IN S. 2652 WOULD SO WEAKEN WATER POLLUTION CONTROL EFFORTS THAT THIS BILL OUGHT TO BE CALLED THE "ANTI-FISHING BILL OF 1982."

I WOULD LIKE TO DISCUSS IN A LITTLE MORE DETAIL HOW SEVERAL PROVISIONS OF S. 2652 WOULD DAMAGE COMMERCIAL FISHING, AND THEN MENTION OTHER POLLUTION PROBLEMS THAT EPA FAILS TO ADDRESS.

<u>TOXICS ARE DESTROYING OUR FISHERIES</u>

THE DISCHARGE OF TOXIC POLLUTANTS CONTAMINATE OUR FISHING BEDS, NURSERIES, AND SPAWNING GROUNDS. NATIONWIDE, AN ESTIMATED

1,130,000 POUNDS OF TOXIC METALS AND ORGANIC CHEMICALS ARE DISCHARGED INTO OUR SEWERS AND WATERWAYS EVERY DAY. IN THE CHESAPEAKE BAY, AN ESTIMATED 11,000 POUNDS OF TOXIC HEAVY METALS ALONE ARE DISCHARGED DIRECTLY INTO THE BAY DAILY (ABOUT 4 MILLION POUNDS A YEAR). ANOTHER UNKNOWN THOUSANDS OF POUNDS ARE DISCHARGED INTO PUBLIC SEWAGE TREATMENT PLANTS THAT DISCHARGE THEIR WASTES INTO THE BAY.

S. 2652 WOULD INTERFERE WITH THE ELIMINATION OF THESE WASTES BY DELAYING THE ISSUANCE AND IMPLEMENTATION OF THE BEST AVAILABLE TECHNOLOGY (BAT) CLEAN-UP STANDARDS FOR INDUSTRIES THAT DISCHARGE TOXICS DIRECTLY INTO WATERWAYS (SECTION 2 AND SECTION 6, S. 2652). IN ADDITION, S. 2652 ESSENTIALLY ELIMINATES THE MANDATORY NATIONWIDE INDUSTRIAL PRETREATMENT PROGRAM FOR INDUSTRIES THAT DISCHARGE TOXICS INTO PUBLIC SEWERS AND TREATMENT PLANTS. THE BILL WOULD CREATE A DISCRETIONARY PRETREATMENT PROGRAM THAT PUTS THE BURDEN OF CLEANING UP INDUSTRIAL TOXICS ON MUNICIPAL PLANTS INSTEAD OF ON THE POLLUTERS.

IF THE EXISTING BAT AND PRETREATMENT PROGRAMS WERE ALLOWED TO GO INTO EFFECT, NEARLY 75.1% OF THE 400 MILLION POUNDS OF TOXIC METALS AND ORGANICS DISCHARGED ANNUALLY NATIONWIDE WOULD BE REMOVED. AND ALTHOUGH I AM NO WATER POLLUTION CONTROL EXPERT, I CAN TELL YOU THIS: WHILE THESE POISONS GO UNCONTROLLED, THEY THREATEN OUR VALUABLE FISHERIES, AND MY BUSINESS.

IN ADDITION, EPA'S PROPOSALS TO DELAY TOXICS CONTROLS ON NEW SOURCES OF INDUSTRIAL POLLUTION (SECTION 5), AND TO EXEMPT FEDERAL FACILITIES FROM TOXIC CLEAN-UP STANDARDS (SECTION 10), MEANS THAT THE LEVEL OF POISONOUS SUBSTANCES ENTERING THE FRAGILE AQUATIC ENVIRONMENT WILL INCREASE.

DAMS POLLUTE

WATER POLLUTION PROBLEMS CAUSED BY DAMS CAN DIRECTLY HARM

FISHERIES. DAMS CAN CAUSE INCREASED SEDIMENTATION, DECREASED LEVELS OF DISSOLVED OXYGEN, AND DRASTIC CHANGES IN WATER TEMPERATURE, ALL OF WHICH CAN CAUSE FISH KILLS OR PERMANENTLY DISRUPT FISH HABITAT. THESE PROBLEMS SHOULD NOT BE IGNORED BY THIS SUBCOMMITTEE.

FOR EXAMPLE, THE COLUMBIA, SAFE HARBOR, HOLTWOOD, AND CONOWINGO DAMS ON THE SUSQUEHANA RIVER, WHICH FLOWS INTO THE CHESAPEAKE BAY, HAVE COLLECTIVELY CAUSED SERIOUS DECREASES IN DISSOLVED OXYGEN FROM ERRATIC STORE AND RELEASE PATTERNS THAT CAUSED AT LEAST ONE KNOWN FISH KILL OF 20,000 WHITE PERCH AND STRIPED BASS. IN ADDITION, THESE FOUR DAMS HAVE INCREASED THE FLOW OF SEDIMENT INTO THE CHESAPEAKE BAY FROM THE SUSQUEHANA RIVER, WHICH HAS REDUCED THE DEPTH OF THE SUSQUEHANA FLATS DELTA AREA FROM 20 FEET TO 2 FEET. INCREASED SEDIMENT LOADS AND TURBIDITY FROM THE SUSQUEHANA HAVE ALL BUT ELIMINATED FISH HATCHING IN THAT PART OF THE BAY.

EPA PROPOSES TO DEFINE THE 1,000 - 1,500 DAMS THAT CAUSE SERIOUS WATER POLLUTION PROBLEMS AS NON-POINT SOURCES (SECTION 14 OF S. 2652). THESE DAM-RELATED POLLUTION PROBLEMS WILL PROBABLY GO UNADDRESSED AS DAMS ARE RELEGATED TO THE BLACK HOLE OF POLLUTION CONTROL, THE SECTION 208 PROGRAMS FOR NON-POINT SOURCE POLLUTION. I STRONGLY BELIEVE THAT DAMS THAT CAUSE WATER POLLUTION PROBLEMS AND FISH KILLS ARE POINT SOURCES AND OUGHT TO BE REGULATED AS SUCH. FORCING THE ALREADY FINANCIALLY SQUEEZED STATES TO TAKE RESPONSIBILITY FOR DEVISING SOLUTIONS FOR WATER POLLUTION FROM DAMS, MANY OF WHICH ARE FEDERALLY OWNED AND OPERATED, IS TO CONDEMN THE FISHERIES ADJACENT TO POLLUTING DAMS TO CONTINUED ABUSE.

FISH AND HEAT DON'T MIX

THE CLEAN WATER ACT ALLOWS POWER PLANTS AND INDUSTIRES THAT

DISCHARGE HEAT OR "THERMAL" POLLUTION TO RECEIVE AN EXEMPTION FROM HEAT REDUCTION REQUIREMENTS OF THE ACT IF THEY CAN PROVE THAT THEIR THERMAL DISCHARGES WILL HAVE NO ADVERSE EFFECTS ON "BALANCED INDIGENOUS POPULATIONS OF FISH AND SHELLFISH." THIS PROVISION WAS DEVELOPED SPECIFICALLY TO PROTECT FISHERIES FROM DRASTIC OR PERIODIC FLUCTUATIONS IN TEMPERATURE CAUSED BY THE DISCHARGE OF HEATED WATER.

S. 2652 WOULD ALLOW PLANTS TO DISCHARGE THERMAL POLLUTION AS LONG AS "BALANCED POPULATIONS" OF FISH CAN SURVIVE THE DISCHARGE (SECTION 11). CONCEIVABLY, THERMAL DISCHARGES THAT LEAD TO THE REPLACEMENT OF NATIVE SHELLFISH WITH CATFISH WOULD BE ALLOWED. IN ADDITION, UNDER S. 2652, THE DISCHARGER WOULD BE ABLE TO MEET DISCHARGE REQUIREMENTS BY USING COOLING EQUIPMENT OR BY MITIGATING EFFECTS OF THE DISCHARGE BY RESTOCKING AREAS OF DEPLETED FISH POPULATIONS. FROM MY EXPERIENCE, RESTOCKING CAN NEVER REPLACE NATIVE POPULATIONS OF FISH ONCE THEY ARE ELIMINATED, AND IS USUALLY A DISMAL FAILURE.

THE CALVERT CLIFFS ATOMIC POWER PLANT ON THE BAY CURRENTLY DISCHARGES APPROXIMATELY 3.5 BILLION GALLONS OF HEATED WATER A DAY. YET, BECAUSE THE CLEAN WATER ACT MANDATES PROTECTION FOR NATIVE POPULATIONS OF AQUATIC LIFE, THE OYSTER BEDS NEAR THE DISCHARGE SITE HAVE ACTUALLY THRIVED AND PROSPERED. BALTIMORE GAS AND ELECTRIC COMPANY, WHICH OWNS AND OPERATES THE PLANT, WANTS TO INCREASE THE TEMPERATURE OF ITS DISCHARGE. SINCE THE PROTECTIONS OF THE CLEAN WATER ACT PROHIBITS THIS, BG&E IS USING THERMAL HEATED PONDS FOR ITS EXCESS THERMAL DISCHARGE. THESE PONDS ARE ALSO BEING USED TO RAISE SHRIMP. IF THIS EXPERIMENT SUCCEEDS, NEW INDUSTRY WILL RESULT, AND THE BAY WILL STILL BE PROTECTED FROM ADDITIONAL THERMAL POLLUTION.

NATIONWIDE, THERMAL DISCHARGERS OUGHT TO TAKE ADVANTAGE OF THIS TYPE OF SITUATION TO ENHANCE OR AUGMENT EXISTING FISHERIES, AND CREATE JOBS. HOWEVER, IF THE BALANCED INDIGENOUS POPULATION REQUIREMENT IS ELIMINATED, AND ARTIFICIAL, INEFFECTIVE MITIGATION MEASURES ARE ALLOWED, PLANTS WOULD NO LONGER BE FORCED TO PROTECT NATIVE FISHERIES. INSTEAD, THEY WOULD BE ALLOWED TO INCREASE THE TEMPERATURE OF THEIR THERMAL DISCHARGES AND DESTROY NATIVE FISHERIES. THIS PROVISION IS A DIRECT ASSAULT ON MY LIVELIHOOD, AND I STRONGLY URGE YOU TO REJECT IT.

THERE ARE TWO SERIOUS WATER POLLUTION PROBLEMS ON THE BAY AND ACROSS THE COUNTRY THAT ARE NOT ADDRESSED BY S. 2652: THE EFFECTS OF CHLORINATED SEWAGE AND NON-POINT SOURCE POLLUTION. IF THESE PROBLEMS ARE IGNORED, OUR EFFORTS TO CLEAN-UP OTHER TYPES OF POLLUTION WILL BE NEGATED.

CHLORINE KILLS

CHLORINE IS OFTEN USED TO TREAT MUNICIPAL SEWAGE. UNFORTUNATELY, IT CAN DO MORE HARM THAN GOOD. NOT ONLY IS IT INADEQUATE TO TOTALLY ELIMINATE THE BACTERIA IN WASTEWATER, THE CHLORINE MOLECULES CAN COMBINE WITH OTHER ORGANIC MATTER TO FORM DEADLY COMPOUNDS LIKE CHLORINATED HYDROCARBONS. ONCE DISCHARGED INTO THE WATER, THESE COMPOUNDS CAN KILL AND DEFORM FISH. CURRENTLY, MARYLAND USES NEARLY 30 TONS OF CHLORINE A DAY TO TREAT ITS WASTES AND MUCH OF THIS WINDS UP IN THE BAY.

ENGLAND NO LONGER CHLORINATES ITS WASTEWATER, AND THE THAMES RIVER IS NOW A MARVEL OF CLEAN WATER. THE THAMES IS NOW THE MAIN FISH NURSERY TO THE EASTERN AREAS OF FISHING IN THE BRITISH ISLES.

LAST YEAR, THIS SUBCOMMITTEE WISELY INCREASED FINANCIAL INCENTIVES FOR COMMUNITIES TO USE INNOVATIVE OR ALTERNATIVE WASTEWATER TREATMENT TECHNOLOGIES. THE INCREASED USE OF THESE OFTEN

ENVIRONMENTALLY SOUND ALTERNATIVES SHOULD DECREASE PROBLEMS FROM CHLORINATED SEWAGE. HOWEVER, IT'S MY EXPERIENCE THAT MANY COMMUNITIES ARE IGNORANT OF THESE TECHNOLOGIES, SO THEY DO NOT USE THEM. I RECOMMEND THAT THIS SUBCOMMITTEE HELP INCREASE PUBLIC AND CITY OFFICIALS' AWARENESS ABOUT THESE TECHNOLOGIES TO EXPAND THEIR APPLICATION. IN ADDITION, I STRONGLY ENCOURAGE YOU TO INVESTIGATE IN-DEPTH THE PROBLEMS CAUSED BY THE USE OF CHLORINE IN SEWAGE TREATMENT SYSTEMS.

RUN-OFF PROBLEMS PERSIST

AGRICULTURAL AND URBAN RUN-OFF, OR NON-POINT SOURCE POLLUTION, CONTINUES TO PLAGUE THE WATERS OF THE BAY AND ELSEWHERE. CONVENTIONAL AND TOXIC WATER POLLUTION FROM FARMS, CONSTRUCTION SITES, ROADS, AND HIGHWAYS COULD NEGATE MUCH OF OUR EFFORTS TO CONTROL POINT SOURCES OF POLLUTION.

IN THE BAY, AGRICULTURAL RUN-OFF CONSISTS OF HERBICIDES, PESTICIDES, AND FERTILIZERS WHICH ARE ALL HIGHLY TOXIC. THESE SUBSTANCES KILL OR IMPAIR FISHERIES AND THEIR HABITAT. YET WE CONTINUE TO ENCOURAGE FARMERS TO BUILD DITCHES THAT QUICKEN THE RUN-OFF OF THESE POISONS. OUR AGRICULTURE AGENCIES CONTINUE TO IGNORE THIS PROBLEM. WE ALSO ALLOW COUNTY HIGHWAY DEPARTMENTS TO RUN THEIR DITCHES INTO THE NEAREST STREAM.

RATHER THAN SPENDING THEIR TIME AND OUR TAX DOLLARS WORKING TO UNDO EXISTING CONTROLS ON WATER POLLUTION, EPA SHOULD WORK TO DEVELOP A PRACTICAL IMPLEMENTABLE SOLUTION TO NON-POINT SOURCE POLLUTION.

WETLANDS: CRITICAL FOR FISH

FINALLY, I WOULD LIKE TO ADDRESS A LEGISLATIVE PROPOSAL THAT WOULD WEAKEN WETLANDS PROTECTION, EVEN THOUGH S. 2652 CONTAINS NO SUCH PROVISION. S. 777

WOULD ALL ELIMINATE FEDERAL PROTECTION FOR ABOUT 85% OF THE 148 MILLION ACRES OF WETLANDS CURRENTLY PROTECTED BY THE SECTION 404 DREDGE AND FILL PROGRAM OF THE CLEAN WATER ACT.

WETLANDS ARE CRITICAL TO THE FISHERIES OF THE CHESAPEAKE BAY AND ACROSS THE NATION. THE DEPARTMENT OF COMMERCE HAS ESTIMATED THAT AT LEAST 66 PERCENT OF THE COMMERCIALLY IMPORTANT FISH AND SHELLFISH HARVESTED ALONG THE ATLANTIC AND GULF COASTS SPEND AT LEAST PART OF THEIR LIFE CYCLE IN FRESH AND SALT WATER MARSHES. THESE SPECIES INCLUDE SALMON, CRAB, AND OYSTERS. WETLANDS PROVIDE FOOD, SPAWNING GROUNDS, AND NURSERIES FOR FISHERIES. IN ADDITION, THEY ACT AS BUFFER ZONES THAT TRAP AND FILTER POLLUTANTS FROM RUN-OFF BEFORE THEY CAN ENTER THE RECEIVING WATERS. THE WETLANDS ADJOINING THE BAY ARE ITS ONLY PROTECTION FROM AGRICULTURAL RUN-OFF.

THE ARMY CORPS OF ENGINEERS ESTIMATES THAT THE SECTION 404 PROGRAM PREVENTS THE DESTRUCTION OF OVER 300,000 ACRES OF WETLANDS A YEAR, MOSTLY THROUGH CHANGES IN PROPOSED PROJECTS. IN THE CHESAPEAKE BAY, THE 404 PROGRAM HAS HELPED STEM THE TIDE OF COASTAL WETLANDS DESTRUCTION THAT THREATENED TO ELIMINATE THE COMMERCIAL FISHING INDUSTRY AS WE KNOW IT IN THE CHESAPEAKE BAY. I STRONGLY URGE YOU TO REJECT THESE AND OTHER LEGISLATIVE PROPOSALS THAT WOULD SCALE BACK THE JURISDICTION OF THE SECTION 404 PROGRAM OF THE CLEAN WATER ACT.

THE CLEAN-UP OF THE WATERS OF THE CHESAPEAKE BAY AND AROUND THE NATION STILL HAVE A LONG WAY TO GO. CONTROLS ON TOXIC INDUSTRIAL POLLUTION MUST BE IMPLEMENTED SOON. AGRICULTURAL AND URBAN RUN-OFF MUST BE REDUCED. CRITICAL WETLANDS ARE BEING DESTROYED AT THE RATE OF 300,000 ACRES ANNUALLY. WE CANNOT CONTINUE TO

INSULT OUR FRAGILE AQUATIC ENVIRONMENTS WITH POLLUTION AND EXPECT THEM TO PROSPER OR SURVIVE. THIS SUBCOMMITTEE CAN MAINTAIN OUR CLEAN-UP EFFORTS BY REJECTING S. 2652, THE ANTI-FISHING BILL OF 1982, AND INSTEAD RENEW THE CLEAN WATER ACT FOR FOUR YEARS WITHOUT MAJOR CHANGES.

IN ADDITION, I URGE YOU TO ENCOURAGE EPA TO WORK ON DEVELOPING PRACTICAL, IMPLEMENTABLE SOLUTIONS TO WATER POLLUTION PROBLEMS THAT ARE NOT ADEQUATELY ADDRESSED BY THE CLEAN WATER ACT, INSTEAD OF WORKING TO UNDO EXISTING PROTECTIONS.

THE FATE OF OUR WATERS AND FISHERIES, AND MY LIVELIHOOD, RESTS ON YOUR ACTIONS.

THANK YOU FOR YOUR TIME. I AM HAPPY TO ANSWER ANY QUESTIONS YOU MIGHT HAVE.

STATEMENT OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
IN SUPPORT OF LEGISLATION TO
EXCLUDE DAMS FROM NPDES CONTROLS

The Metropolitan Water District of Southern California strongly supports legislation to expressly exclude water supply dams from the National Pollutant Discharge Elimination System controls contained in the Federal Clean Water Act. We, along with the Environmental Protection Agency and the nation's water resources agencies generally, have for over a decade interpreted that Act as excluding dams from NPDES controls. However, in view of the U.S. District Court decision earlier this year in National Wildlife Federation v. Gorsuch to impose those controls on all dams, it has become imperative to seek a more explicit congressional statement that NPDES jurisdiction does not extend to water supply dams.

The District Court decision unfortunately distorts the Clean Water Act's carefully balanced comprehensive pollution control plan, by expanding its pollutant control element well beyond the scope Congress intended. Indeed, it would effectively eliminate the Act's distinction between "pollution" and "pollutant" and thus divert federal enforcement resources from controlling the true pollutants that pose serious threats to public water supplies. More directly, the decision threatens Metropolitan's water supply by subordinating existing controls over the release

of water from dams, needed to provide essential public water supplies. Metropolitan has accordingly filed a friend of the court brief with the Circuit Court of Appeal, urging it to reverse the District Court decision.

Metropolitan has a vital interest in this issue because it imports over 1.5 million acre-feet of water annually from Northern California and from the Colorado River for people and businesses in a six-county area on Southern California's semi-arid coastal plain. That area includes over half of California's 24 million people and 12 of California's 20 largest cities. Imposition of NPDES jurisdiction on water supply dams would impair, if not disrupt, the operation of the reservoirs on which Metropolitan relies for its water supplies; in order to regulate an open-ended array of secondary water quality characteristics that currently fall within existing state and federal regulatory authorities.

For example, NPDES controls would subvert state water quantity allocations that balance alternative beneficial water uses on the basis of public interest and reflect state water quality control plans. Further, in view of the Clean Water Act's expansive definition of navigable waters, these controls may create redundant regulation of releases of water from distribution system reservoirs directly into water supply conduits now regulated by the Safe Drinking Water Act. Thus, the decision opens the door for new controls over water supply operations. However, as water supply demands intensify, those operations

must meet ever-increasing system constraints that leave little room for flexibility.

Metropolitan's two water supply sources, the California State Water Project and the federal Boulder Canyon Project, are multi-billion dollar reservoir systems that rely on carefully regulated releases from their respective dams. Those releases are carefully tailored, by sophisticated analysis, to implement water rights regulations which incorporate significant environmental, water quality, and other public interest protections.

Thus, California State Water Resources Control Board regulates the operation of State Water Project dams under water rights permits that interrelate closely with the operation of the multi-billion dollar federal Central Valley Project. Indeed, releases of stored water from the principal two dams of those respective projects, Oroville Dam on the Feather River and Shasta Dam on the Sacramento River, are coordinated by state water rights decisions that control those releases to maintain downstream water quality standards for fish and wildlife, as well as water supplies in the Sacramento-San Joaquin Delta. Imposing additional downstream water quality standards in excess of those required under state water rights law could severely affect the operation of those projects and impair their ability to meet water supply delivery obligations to scores of public agencies, including Metropolitan, throughout the State.

Similarly, the Colorado River dams that store and provide water for Metropolitan operate under coordinated long-range

criteria that Congress mandated in the Colorado River Basin Project Act. Those criteria perfect basic operation controls for lower Colorado River dams imposed by the Supreme Court in its 1964 decree in Arizona v. California, 376 U.S. 340. That decree, in turn, implements the court's validation of the Secretary of the Interior's allocation of Lower Colorado River water quantities by his water supply contracts with Metropolitan and other lower basin water agencies. (Arizona v. California (1963) 373 U.S. 546.)

By disrupting existing operational controls over the release of stored water from dams, NPDES controls could also compel Metropolitan to construct additional storage facilities within its service area in order to adjust for the resulting disruption of water delivery schedules. The costs of that construction, as well as the costs of structural changes that the decision may impose on the dams which now provide Metropolitan's water supply, would tangibly and unnecessarily increase consumer water prices for the millions of people that live and work within Metropolitan's service area.

Metropolitan, therefore, strongly supports legislation to add to the Clean Water Act, a specific recognition that NPDES controls do not apply to the storage of water behind, and the release of that water from, dams. In our opinion, the most practical method of adding that explicit recognition in the Act, would be to augment the definition of "discharge of a pollutant" (§502(12)) as proposed in S 2280 or HR 6554. While we also

support the alternative proposed in S 2652 of augmenting the definition of "point source" (§502(14)), we consider that alternative unduly cumbersome, since it also involves amendment of §§402(l) and 303(e) of the Act. Furthermore, that alternative appears to duplicate the pollution control measures for dams, already set forth in §§201(c), 208(b) and 304(f)(2)(F) of the Clean Water Act.

* * *

STATEMENT OF L. BENNETT COY, GENERAL MANAGER
THE MIAMI CONSERVANCY DISTRICT

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

Regarding S. 2652

The Miami Conservancy District is a regional flood control and water resource management agency located in Southwest Ohio, with headquarters in Dayton, Ohio (map attached). The District was formed following the 1913 flood in which over 300 individuals lost their lives and which also caused over $100 million in damages to property within the Great Miami River Basin--in 1913 dollars. To ensure against another such disaster, The Miami Conservancy District was formed in 1915 and constructed a flood control system to protect the urban areas of the Basin from a flood of the 1913 magnitude plus 40 percent. The entire $30,860,500 cost of the flood control system was paid by assessments against local property owners and political subdivisions within the Great Miami River Basin. Since completion of the flood control works in 1922, the benefited property owners and public agencies (cities and counties) have paid more than $43,600,000 to operate and maintain the facilities without Federal or State investment in capital improvements or maintenance. The system has stored floodwaters on over one thousand occasions since 1915. The Miami Conservancy District represents an example of what many in the Congress and the

present Administration are today advocating--a local problem solved by local people without Federal subsidy.

The Federal Water Pollution Control Act as amended and redesignated the Clean Water Act provided the Environmental Protection Agency and subsequently the U.S. Army Corps of Engineers with permit authority over "dredge and fill" activities under Section 404. This section of the Act was understood by Congress and water resource managers to apply only to the historic definition of navigable waters. However, jurisdiction was broadened by a Federal court decision to include not just "navigable waters" but all of the "waters of the United States."

In May, 1979, the Corps of Engineers, as a result of the court action, declared the Great Miami River and its major tributaries to be navigable. The District filed suit objecting to the designation. The Cincinnati Federal District Court, in February, 1981, upheld the District's contention that the Great Miami River and its tributaries "are not now nor have they ever been navigable streams within the meaning of Section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 403." This decision is now on appeal before the Sixth Circuit Court of Appeals. The decision, if upheld by the Court of Appeals, will remove the burden to the District of Federal jurisdiction under the 1899 Act. However, it will not remove the burden of Section 404, the impact of which extends beyond "navigable waters" to "waters of the United States."

The District's history with Section 404 and with the Federal regulatory agencies responsible under this Act has been checkered. As an example, I would like to relate the case histories of two permit applications filed by the District.

In June, 1975, The Miami Conservancy District was requested by the City of Dayton and Montgomery County elected officials to design and construct a low head dam for recreational purposes as part of a downtown Dayton, Ohio, renewal and improvement program. On November 14, 1975, The Miami Conservancy District applied to the Louisville District Corps of Engineers for a Section 404 permit. The Corps subsequently requested additional information, and, following public notice, requests were received from the Fish & Wildlife Service and the U.S. Environmental Protection Agency asking that the permit be held in abeyance until each agency received additional information. The requested information was provided promptly.

Federal EPA decided not to object to the proposed permit, subject to the inclusion of five conditions in the final permit which were agreed to by the District. The U.S. Fish & Wildlife Service would not reduce their comments to writing, and the Corps would not make a decision concerning the application without such comments. Senator Robert Taft, Jr. was contacted by the District early in May, 1976. The U.S. Fish & Wildlife Service comments were reduced to writing

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and their letter of May 26, 1976, contained three conditions for permit approval which were agreed to by the District. The project was then promptly constructed.

In summary, the permit application for the Dayton Low Dam project required 202 days to process, a significant expenditure of time and local funds and much wasted effort. The delay added $15,000 to the local cost of the project.

The second request for a 404 permit is even more of a horror story. Miami Conservancy District personnel met with the Louisville District Corps representatives on November 5, 1977. The Corps suggested that the District file for a General 404 Permit for routine and emergency maintenance, and the District did so.

The Corps responded that the application was "not in consonance with the General Permit provisions of our regulations," even though such application had been submitted based upon Corps suggestion. The Corps letter suggested that the application be reconsidered and resubmitted, which decision was appealed to the Ohio River Division Engineer and the District Engineer in Louisville.

On April 19, 1978, the Conservancy District and the Corps met again to discuss permit requirements. During this meeting, the Corps suggested three situations in which a General 404 Permit might be applicable: 1) 2,000 linear feet of bank protection; 2) construction of equipment access ramps; and 3) the shaping of beaches and berms. The District transmitted a revised permit application nine days later.

No action was taken by the Corps for over two and one-half years after resubmission of this application, despite repeated verbal requests. Finally, the Conservancy District General Manager wrote to the Louisville District Corps. The Corps responded on December 22, 1980, "apologized for this oversight," and during the first six months of 1981, correspondence between the District and the Louisville District Corps flowed freely as public notices were issued for two of the three requested items.

During the course of the correspondence, it was determined by the Corps that the third item requested, the shaping of beaches and berms, was not appropriate for a General Permit. Copies of other General Permits in the Louisville District were provided The Miami Conservancy District as examples of the type of actions subject to such permits. This District responded to the Corps that several of the General Permits "closely correspond to this Conservancy District's description of 'shaping of berms'."

During the public comment period on the first two sections of the proposed General Permit, the Louisville District received questions from the Fish & Wildlife Service, U.S. Environmental Protection Agency, and Ohio Department of Natural Resources. The Conservancy District responded promptly to these questions in each case.

On June 10, 1981, the General Manager of The Miami Conservancy District wrote Vice President Bush concerning the difficulties the District had experienced in its attempt to obtain a General Permit to perform its normal maintenance

functions. A meeting was held on August 6, 1981, with the Corps Division Engineer, the Louisville District Engineer, and staff members of both the Corps and the District to discuss the General Permit problems. The Corps provided 17 individual permits for equipment ramps. Two of the 17 were later modified, and, ultimately, a total of 20 permits was issued by the Corps. Shortly thereafter a General Permit for bank protection was finally approved by the Corps.

The Conservancy District then requested that the Corps District Engineer issue an unequivocal statement of denial of the permit request for shaping of berms. The purpose was to allow the District, once this denial was obtained, to appeal the decision to the District Engineer in Cincinnati. Such appeal was filed on December 9, 1981, and the Division Engineer responded on January 21, 1982, that "a general permit is inappropriate under the law and regulations and he (the District Engineer) therefore need not to pursue a development of a general permit for the shaping of berms."

After more than four years, The Miami Conservancy District has achieved two-thirds of the original objectives set forth in the permit application dated February 8, 1978, which permit objectives were originally suggested by the Corps. The people of the Great Miami River Basin, who pay the total cost to maintain the local flood protection system, now find that the regional, locally financed agency responsible for such maintenance must obtain prior approval from the Corps, the U.S. Environmental Protection Agency, Fish & Wildlife, or any other Federal, state, or local agency

aligned with the Corps. This is a most frustrating, disheartening system, when a responsible, widely respected, locally financed agency is prevented from accomplishing its legally mandated functions because of bureaucratic double-talk and red tape, particularly when agencies having no investment whatsoever in the system are involved.

This District therefore has come to Congress requesting relief from this regulatory burden. The Corps has taken the position that this District cannot be issued a General Permit for routine and emergency maintenance activities such as the shaping of beaches and berms. The Corps has told this District that existing law as well as regulations prohibit issuance of a General Permit for such activities because there is "significant potential environmental impact."

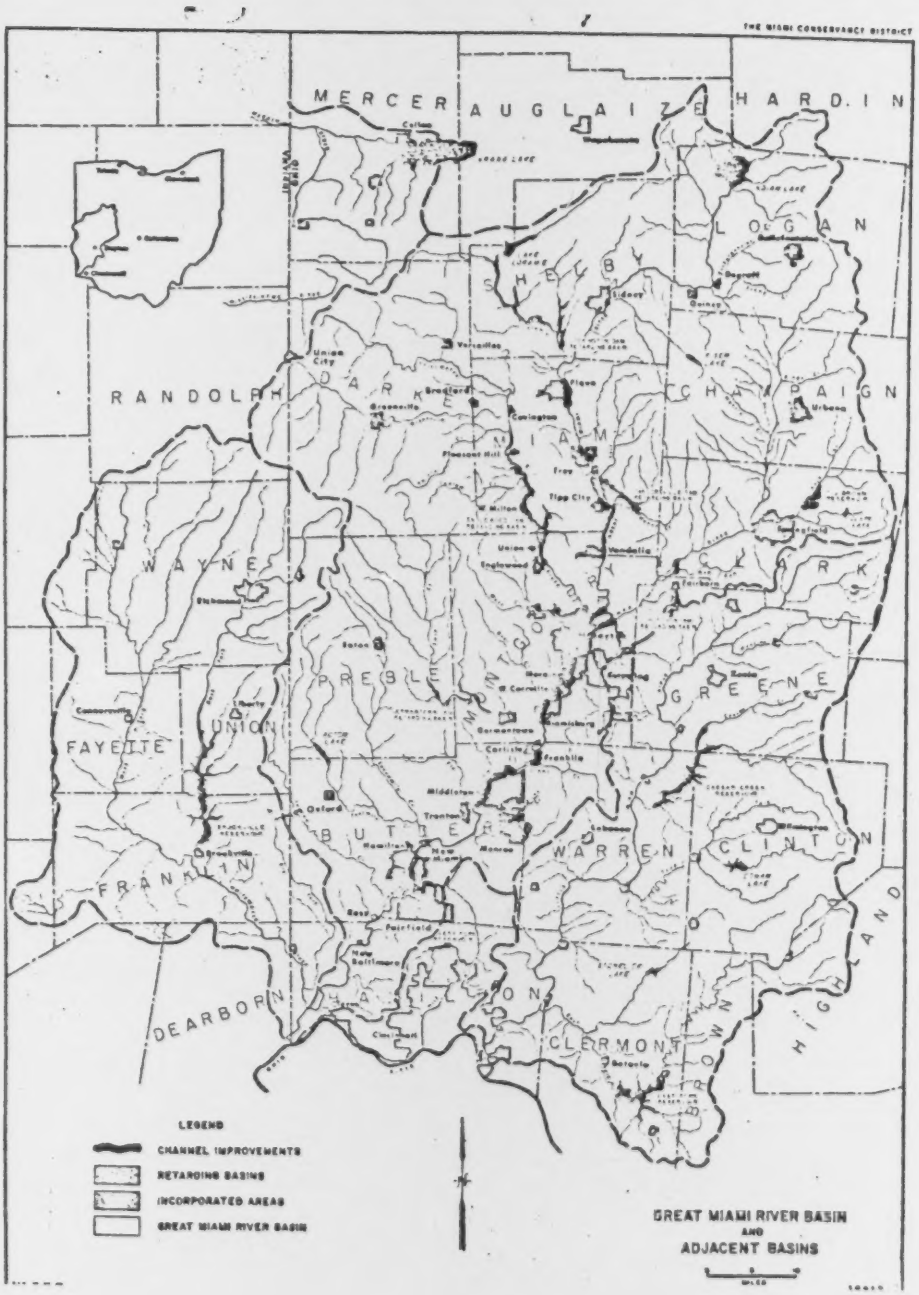
THE MIAMI CONSERVANCY DISTRICT IS NOT A LAND DEVELOPER, SWAMP DRAINER, MONUMENT BUILDER, OR DESTROYER OF THE ENVIRONMENT. RATHER, IT IS A NATIONALLY KNOWN ENVIRONMENTALLY CONCERNED AGENCY.

Because this District supports environmental protection, it has not sought any change in the criteria of the Clean Water Act. It does not seek, nor does it support, a broad amendment to the Act or to Section 404. Rather, it has requested an exemption from Section 404. All other aspects of the Clean Water Act and the Rivers and Harbors Act of March 3, 1899, would continue to apply to this District.

In conclusion, the District is requesting regulatory relief, and only that regulatory relief which is absolutely necessary if this District is to continue to function as a regional (local) flood control and water resource management agency without unnecessary and costly regulatory burdens and delays. The 67 year history of flood protection and environmental concern, together with wholly locally financed status, justifies such relief. The District is hopeful that the members of this Subcommittee will consider and adopt such an amendment during these proceedings on proposed revisions to and extension of the Federal Water Pollution Control Act. Attached please find a proposed amendment and technical explanation for your consideration.

Thank you for your courtesy.

August 4, 1982


THE MIAMI CONSERVANCY DISTRICT
MERCER
AUGLAIZE
HARDIN
LOGAN
SHELBY
RANDOLPH
DARKE
CHAMPAIGN
MIAMI
WAYNE
CLARK
PREBLE
GREENE
FAYETTE
UNION
BUTLER
WARREN
CLINTON
FRANKLIN
DEARBORN
CLERMONT
BROWN
HIGHLAND
LEGEND
CHANNEL IMPROVEMENTS
RETARDING BASINS
INCORPORATED AREAS
GREAT MIAMI RIVER BASIN
GREAT MIAMI RIVER BASIN
AND
ADJACENT BASINS

MONTANA POWER COMPANY mpc GENERAL OFFICES 40 EAST BROADWAY, BUTTE, MONTANA 59701 • TELEPHONE 406/723-5421

GILBERT LeKANDER
Washington Representative
1629 K Street, NW - # 801
Washington, D.C. 20006
(202) 296-3080

August 3, 1982

Honorable Robert T. Stafford, Chairman
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

Enclosed is a statement by Joseph A. McElwain, Chairman, The Montana Power Company, which we hope may be included in the record of your July 29 hearings on amendments to the Clean Water Act.

Mr. McElwain's statement illustrates the effect of the recent court decision concerning dams upon one electric utility heavily dependent upon hydro, and urges adoption of the amendments suggested by the Administration and in bills by Senator Murkowski (and nine co-sponsors) and Senators Hart and Gorton to make clear that dams are not point sources of water pollution.

Thank you,

Gilbert LeKander
Washington Representative

GL:lw
Enclosures

BEFORE THE U.S. SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
AMENDMENTS TO THE CLEAN WATER ACT REGARDING DAMS

TESTIMONY
OF
JOSEPH A. McELWAIN

July 29, 1982

Mr. Chairman and Members of the Committee:

I am Joseph A. McElwain, Chairman and Chief Executive Officer of the Montana Power Company. I reside in Butte, Montana, headquarters for the Company.

Montana Power is an investor-owned electric and gas utility operating in the western two-thirds of Montana. Our service area consists of about 107,000 square miles. Over 80% of the total population of the State live in our service area.

To serve Montana Power's 244,000 electric customers, the Company owns and operates 13 hydroelectric facilities and five thermal electric plants.

Hydro generating facilities produced all of Montana Power's electricity from the time the Company was formed in 1912 until 1951. Today, the 13 generating plants and two storage reservoirs in the Columbia and Missouri River drainage systems ensure the Company a reliable source of hydro power.

Montana Power has current total electric capability of 1,104,750 kilowatts from thermal and hydro sources. Hydro contributes 520,000 kilowatts to this total capacity, or more than 47 percent.

Nine hydro facilities in the Missouri River drainage include Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams, plus a small facility at Mystic Lake. The Company's largest hydro facility, Kerr Dam, with a 180,000 kilowatt capacity, is in the Columbia River drainage basin, along with the Thompson Falls plant and smaller generating units at Flint Creek and Milltown.

The Company's hydro system in the Columbia River drainage is coordinated with the regional hydroelectric system of the Pacific Northwest. We coordinate our operations in the Missouri drainage with the Bureau of Reclamation and the Army Corps of Engineers.

The value of hydro power is obvious in the current era of energy demand and conservation. Hydro power is a renewable resource.

In the Pacific Northwest, hydro provides the overwhelming majority of electric energy used. The hydro system currently is optimized in its energy production through the efforts of all the utilities and governmental production through the efforts of all the utilities and governmental agencies operating the system within non-power constraints for flood control, navigation, fish propagation and irrigation.

Any additional efforts to further constrain the operations of our Nation's hydroelectric systems by new law or regulations will only waste energy and require unnecessary consumption of resources.

It is for this reason that I endorse and support the Administration's Clean Water Act proposals that dams shall not be considered point sources of water pollution for purposes of the Federal Water Pollution Control Act.

It seems a strange twist of logic to note that Congress, in its wisdom, designated return flow from irrigation and runoff from forests and fields as non-point sources of pollution because of the obvious impracticality of NPDES permitting; and then to assume that Congress intended to include in that system as point sources, structures such as dams downstream of fields and forests which merely impound the water and its pollutants. If it is impractical to control by permits the other non-point sources of pollution, it is equally impractical to filter or treat or otherwise cleanse an entire river, such as the Missouri or Columbia, by the "best available technology" inherent in the permit system at each dam on the river, merely because the dam is there and is a handy scapegoat.

Indeed, the mere presence of a dam and impoundment in many cases constitutes the "best available technology" in cleansing the waters of many of our rivers. Much of that cleansing is of pollutants which the river itself produces as it scours its own streambed during flood stage. My Company has operated nine dams along the Madison and upper Missouri Rivers in Montana for more than 50 years and, as a result, those rivers are more drinkable, more swimable and more fishable now than they were in the natural state. We have some of the finest "blue ribbon" trout fishing available in the country along those two rivers.

If dams are considered to be point sources of water pollution, our Company alone will probably have to spend in the order of $150,000 to $300,000 merely to monitor water quality and prepare applications for permits. Government agencies would probably spend up to twice that amount to process our applications, and in the years required to obtain permits, we would be exposed to the possible burden of citizens' suits and the civil and criminal penalties of the Clean Water Act simply by releasing water from our dams. Remember, it is physically impossible not to release that water.

Although the criteria for effluent limitation for hydroelectric dams have not been set, assume for a moment that just one of our projects, say of 50 MW capacity, would not be able to directly comply with the effluent requirements. We might be faced with designing and building a treatment facility, for example, to process 8,000 cubic feet per second of water (a typical flow in the Missouri River at Great Falls, Montana) to remove suspended solids. That amount of water is 5,170,000,000 gallons per day, or enough water to serve more than 20,000,000 people with their domestic needs. That's the equivalent of the water treatment facilities for three cities the size of New York City, just for one little dam on the Missouri River. At a treatment cost of only 2 cents per 1,000 gallons, the costs of such an endeavor would amount to more than $35 million per year and would increase the cost of electricity from such a dam about twenty-fold. In addition, the collection and disposal of the sediment would give rise to massive environmental problems.

Faced with that magnitude of costs every year, our option would be to breach or eliminate the dam, with all the attendant environmental impacts, abandon the highly valuable renewable energy resource that it provides, and replace that energy resource with a new coal-fired or nuclear generating plant including all of its attendant environmental impacts. The cost of just one such incident on our system could run into $50,000,000 to $100,000,000 in capital costs alone with annual costs amounting to $10,000,000 to $20,000,000 more than the original hydroelectric costs. Our customers would absorb all of these costs simply because we had earlier developed a highly valuable resource which happened to collect years of previous pollution from the entire drainage basin above the dam. Most of that previous pollution was natural rather than man-made. It is possible, of course, that similar other types of treatment might be required at several of our dams so that we would be faced with similar decisions several times over. We would be balancing increased annual costs of $200,000,000 each year for treatment against $300,000,000 to $600,000,000 of new capital investments to abandon the dams.

Obviously, such a result is unacceptable to us and to our customers because the costs far outweigh any imagined benefits. Among the costs are several not evaluated here, such as the loss of flood control benefits, the wasting of a renewable resource, and the burning of millions of additional tons of coal if the dam were breached.

Our country, our customers, and our Company can ill-afford the administrative nightmare that would result from a determination that dams must be considered as point sources. More importantly, we cannot afford the likely ridiculous consequences of having to abandon hundreds of beneficial and valuable water development projects around the country which might not "pass the muster" and which would have to be replaced with other more costly projects with greater environmental impacts. I, therefore, once again urge your support of provisions which clarify that releasing impounded water does not violate the Clean Water Act.

CONGRESS SHOULD CLARIFY THE SAVINGS CLAUSE OF THE CLEAN WATER ACT IN LIGHT OF THE SUPREME COURT'S DECISION IN CITY OF MILWAUKEE v. ILLINOIS

Statement

of the

NATIONAL ASSOCIATION OF ATTORNEYS GENERAL

Before the U.S. Senate

Committee on the Environment And Public Works

Mary L. Lyndon

Assistant Attorney General

for the

State of New York

INTRODUCTION

The Supreme Court's 1981 decision in City of Milwaukee v. Illinois, 451 U.S. 304 (1981), has been widely misinterpreted. It has been argued in some cases that City of Milwaukee holds that both state and federal common law of nuisance have been abolished by Congress. Neither of these conclusions results from the decision, which contains a carefully drawn and narrow holding.

The National Association of Attorneys General believes that, even so, the Court's decision in City of Milwaukee misconstrues Congress' intent, particularly in light of the legislative history of the Water Pollution Control Act. NAAG has urged Congress to amend the Act to clarify these points, as they apply to common law water pollution cases. See The Report of the National Association of Attorneys General to the United States Congress on Reauthorization of the Clean Water Act, March, 1982. We urge the Senate to amend the Act's savings clause to prevent further confusion and needless litigation on this point.

Several basic facts about the way Congress wrote the Clean Water Act must be understood at the outset. First, the Act establishes a scheme of controls which function within a broader system of laws. It sets minimum standards for the discharge of effluent. The standards are written

into a dynamic context of federal, state and local laws. These include local zoning and sanitation ordinances, state health, environmental, commercial and labor codes, state common law and equity, and federal statutory and common law. The Act was not written as a comprehensive health code. It does not supplant existing laws, but supplements them. Its savings clause is intended to assure that the Act does not interfere with existing laws, which serve many different purposes.

Second, the Water Act establishes a working partnership between the national and state governments. The states continue to bear the greatest part of the authority and responsibility for implementing and enforcing laws relating to public health, including disposal of wastes. The Act specifically encourages states to make their own decisions on how to regulate wastes. 33 U.S.C. § 1370. One purpose of the savings clause is to continue in effect all existing state enforcement tools for the pursuit of the Act's environmental goals.

Third, in economic terms, the costs of pollution must be borne by someone. To the extent that the Clean Water Act requires technological controls by industry, these costs will be placed appropriately in the sector of the economy that generates them. However, we know that because regulatory standards are averages, even with regulations, in some

circumstances costs will still be externalized. On occasion, these shifted costs may be quite heavy. The common law of nuisance functions to keep some additional costs with the generator, when the public (the state) or private parties are mobilized and can prove to a court that they are bearing the cost of pollution caused by a particular source. Without this option, where regulatory standards allow continuation of serious health and property damage, the costs will either be absorbed by the bystanders, as ill health and environmental damage, or a third legislative option - on the model of the Superfund clean-up campaign - will have to be devised. The common law of nuisance is certainly the more rational, limited and efficient of the alternatives.

CONCURRENT APPLICATION OF COMMON LAW AND STATUTES DOES NOT UNFAIRLY BURDEN INDUSTRY

The cost of pollution control devices is not a basis for allowing preemption of common law. The averaged economic costs of pollution controls are usually considered in the development of regulations, but the actual financial burdens for individual companies vary widely in amount, nature and duration. All polluters should not be shielded from common law obligations by the financial weakness of a few.

Moreover, an individual defendant's financial ability to abate a nuisance is a proper issue for a court in a tort action. Professor Prosser discusses the kinds of balancing judgments which are appropriate in a nuisance case, particularly in fashioning a remedy. "... There is no liability for nuisance unless the defendant's conduct is unreasonable under the circumstances." Prosser, The Law of Torts, 4th Edition, at pp. 598, 602. Economic constraints, the utility of the polluting activity to the community, and the adequacy of existing controls relative to the "state-of-the-art" are all important factors in a nuisance decision.*

Judge-made law does not pose a conflict to statutory law. The history of the federal common law of nuisance shows that the courts have not been quick to contradict the administrative agencies charged with implementing federal statutes. E.g., New England Legal Foundation v. Costle, 475 F. Supp. 425 (D. Conn. 1979). A catalogue of the few federal common law cases of the 1970's would not reveal judicial disregard for the expertise of the agencies. On the contrary, courts are accustomed to deferring to their primary jurisdiction.

*Also, see the analogous toxic drug litigation for treatment of the "state-of-knowledge" or foreseeability issue; e.g., Basko v. Sterling Drug, Inc., 416 F. 2d 417 (2d Cir. 1969); O'Hare v. Merck & Co., 381 F. 2d 286 (8th Cir. 1967).

There is no "certainty" for polluters to be gained by allowing City of Milwaukee to stand unmodified. The context within which Congress wrote the Clean Water Act will remain variable. The water pollution permit system itself is not static. Congress created a dynamic scheme which will require polluters to upgrade controls as technology improves. EPA is required by the Act to foster evolution of new technical standards.

In addition, there are numerous other sources of potential change in pollution control requirements. For example, common law tort actions, such as negligence and wrongful death, may lead to court orders that pollution controls be upgraded. OSHA regulations may be instituted or changed and have an impact on pollution discharges. State laws and local ordinances may also be changed to require stricter controls. Standards may be overturned in a mandamus action on the ground that essential health considerations, perhaps newly discovered, must be taken into account in setting such standards. The future adequacy of pollution control devices may be affected by numerous sources of law, none of which are abolished by the Act.

A superficial view of pollution problems and the water quality regulatory scheme may lead to a first impression that the federal regulatory tools are or must be sufficient. However, this view is facile and fails to account for the complexity of real life situations. As a practical matter,

the Act cannot establish a uniform, final or exclusive scheme by which pollution dischargers can plan their activities for all time. It does not provide theoretical "uniformity for uniformity's sake." See, e.g., Natural Resources Defense Council v. Train, 510 F. 2d 692, 711 (D.C. Cir. 1975).

Arguments that common law remedies interfere with the "efficient operation of the regulatory scheme" and "upset the reasonable expectations" of enterprises which discharge pollutants obscure the issue. They are arguments in favor of licensing negligence, regardless of the human costs. Congress must decisively reject the proposition that federal environmental laws will necessarily tolerate unforeseen harm to humans. This would be an Orwellian state, if the common law were to be abandoned in favor of total dependence on the central bureaucracy.

Through the Clean Water Act Congress has instituted a national cleanup campaign. It has left existing laws intact. The Act's savings clause should make this clear.

THE CLEAN WATER ACT FUNCTIONS IN A COMMON LAW CONTEXT

The common law is the theoretical and functional foundation of this nation's legal system. In addition to

safeguarding private rights, the state common law, particularly the public nuisance action, is an essential tool of state government. It is used to protect the public in certain situations -- when flexibility, speed or an individualized approach is called for. Nuisance law is a basic way in which states exercise the police power and function as parens patriae to preserve the public health and welfare.

State and federal common law of nuisance differ in several ways. State nuisance law is part of the continuing body of the state common law of tort in most of the fifty states. It includes both the law of private and public nuisance - two separate traditions. Many states have also codified public nuisance law.

The federal common law of nuisance is more specialized, as it pertains to interstate disputes and has been limited to public nuisance actions, in which a branch of state or local government has been the plaintiff. The federal common law of nuisance has been applied usually where one state, or a political subdivision of a state, has alleged that a public nuisance in its jurisdiction has been caused by a source in another state.*

*The federal government has also used the federal common law of nuisance to protect navigable waterways. See, e.g., United States v. Ira Bushey & Sons, Inc., 346 F. Supp. 145, 363 F. Supp. 110, (D. Vt. 1973), aff'd 487 F. 2d 1393 (2nd Cir. 1973), cert. denied 417 U.S. 976 (1974); United States v. United States Steel Corporation, 356 F. Supp. 556 (N.D. Ill. 1973).

The nuisance action is part of the mainstream of the common law. Whether in state or federal courts, the same basic substantive law has been applied in recent decades. The Restatement of Torts 2d, § 821-B, defines a public nuisance:

> (1) A public nuisance is an unreasonable interference with a right common to the general public.
>
> (2) Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:
>
> (a) Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
>
> (b) whether the conduct is proscribed by a statute, ordinance or administrative regulation, or
>
> (c) whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.*

As Professor William L. Prosser explains, nuisance is actually a field of tort liability, rather than a type of conduct. A nuisance is an effect caused by negligent or other tortious behavior. Prosser, op. cit., pp. 573-75. Thus, before a court will declare that a nuisance exists,

*Numerous states, including New York, have adopted the Restatement's formulation. See, e.g., Copart Industries v. Consolidated Edison, 41 N Y 2d 465 (1977).

it will conduct the same fact finding and legal proceedings as apply in tort cases generally.

Law concerning permits and licenses has developed alongside the law of nuisance. Permits have been granted traditionally, not as general defenses to all claims arising from an activity, but as limited rights to engage in specific activities. See Phalen v. Virginia, 49 U.S. (8 How.) 163, 167-68 (1850). Any exemption afforded by a license extends only so far as the express or necessarily implied grant contained in the license. For a license to be pleaded as a defense, it must be apparent that the legislature or permitting agency contemplated the doing of the very act which occasions the injury which is claimed to be a nuisance. Richards v. Washington Terminal Co., 233 U.S. 546, 552 (1914). Also, permits and licenses are by their nature restricted by a rule of reason: "Wherever possible the authority given will be construed to permit only reasonable conduct of the enterprise in a reasonable manner, with proper care and due regard for the interests of others... ." Prosser, op. cit. at pp. 606-7 and cases cited therein.

In the environmental statutory context the common law rule of reason operates as a safety valve. Making a permit a complete defense to common law claims would invest EPA with a responsibility and an authority it is not equipped to handle. It would, in effect, authorize EPA to license negligence, regardless of the unforeseen costs which may occur.

THE COMMON LAW AND STATUTES SUPPLEMENT EACH OTHER

Most state constitutions preserve the common law and establish the jurisdiction of the state judiciary over common law claims. A 1975 survey of state case law indicated that numerous states' courts had held that injunctive relief from pollution which is found to be a nuisance is available in spite of an active administrative agency operating in the subject area.* The cases hold that the state legislatures intended to establish administrative environmental controls as a supplement to existing law.

The underlying question in a nuisance case is whether an unreasonable interference with public rights is taking place in a particular situation. Administrative agencies operate by general rules and averaged standards. They therefore tend not to deal with individual situations. Whether a nuisance exists in a particular case is a question of the common law, which administrative agencies are not competent to answer.

*The states included in that survey were California, Delaware, Wisconsin, Pennsylvania, Georgia, New York, Florida and Illinois. See People v. Los Angeles (1958) 160 Cal. App. 2d 494, 325 P 2d 619; Pottock v. Continental Can Co. (1965) 42 Del. Ch. 296, 210 A 2d 295; State v. Dairyland Power Cooperative (1971) 52 Wis. 2d 45, 187 NW 2d 878; Brookhaven v. American Rendering, Inc. (1969) 484 Pa 290, 256 A 2d 626; J.D. Jewell, Inc. v. Hancock (1970) 226 Ga. 480, 175 SE 2d 847; State v. Huntington (1971) 67 Misc. 2d 981; State ex rel. Shevin v. Tampa Electric Co. (1974, Fla. App.) 291 So 2d 15. Also see Village of Wilsonville v. SCA Services, Inc., (1981) 86 Ill. 2d 1, 426 NE 2d 824.

Courts will not issue an injunction, an equitable remedy, where there is a remedy at law. However, a legal remedy is not always available. There will always be situations which cannot be foreseen when a statute or regulation is written. Sometimes even a thoroughly prepared permit will fail to account for a crucial fact. Thus, there are compelling practical needs which are met by the common law.

In the usual attorney general's nuisance case, an individual polluter is negligently causing a local public health problem and the statutory or regulatory scheme does not cover the situation. It may fail to address the problem, because the statute does not address it or because the agency implementing the statute has set enforcement priorities which do not reach this case. Administrative agencies are overloaded with demands and they delay addressing problems which do not seriously affect the majority of citizens, even though they may very critically damage certain localities. For example, EPA has still not issued effluent standards for many toxic pollutants.

Another kind of case develops where permits for an activity are granted, but through the discharger's negligence and because of inadequacies in the agency's prior review - perhaps an unavoidable inadequacy - a public

health problem is caused by permitted activity. While agencies attempt to protect the public, they do not always succeed. Thus, the common law allows for cases in which a permit is not a defense to negligent conduct which is causing injuries.

For example, it is the law of Illinois that a public nuisance may be found to exist and an abatement order issued by a court, even though permits have been granted. In Village of Wilsonville v. SCA Services, Inc. (1981) 86 Il. 2d 1, 426 NE 2d 824, the Illinois Supreme Court upheld an injunction in spite of the fact that the state environmental agency had granted over 100 permits to SCA to develop a site for a hazardous waste landfill. When the villagers became aware of the fact that the permits had been granted, they pointed out that the landfill site was located above an abandoned mine shaft and argued that this would cause shifting of the containment area and consequent discharge of chemicals into the groundwater. The agency had not considered this in granting the permits. Later, the plaintiffs were proven to be right: the site began to leak and was closed down. Cases similar to Wilsonville occur occasionally and can only be adequately dealt with by the common law approach.

CITY OF MILWAUKEE IS A LIMITED DECISION AND SHOULD BE MODIFIED

The City of Milwaukee decision dealt only with the federal common law of public nuisance in the water pollution context. The Court's opinion expressly stated that it was not dealing with preemption of state common law. Indeed, it read the Water Pollution Control Act savings clause to specifically preserve state common law rights. 451 U.S. at 316.*

Even on the limited issue of federal common law, the Court restricted its holding to the facts of that case. The Court held that federal courts shall not apply federal common law of interstate nuisance where (1) a federal statutory scheme provides for completely comprehensive controls on pollution, (2) the federal statute provides administrative processes for resolving interstate disputes and (3) a federal permit has addressed the problem sought to be remedied. City of Milwaukee, 451 U.S. 304, 317-18, 320-26 (1981).

* Congress may preempt state law only where it is necessary to avoid conflicts between state and federal law. City of Philadelphia v. New Jersey, 437 U.S. 617, 621, n. 4 (1978). There is no conflict between the Clean Water Act and the states' use of common law. There is therefore no basis for preemption. Indeed, the state's common law enforcement powers are so basic to their governmental function that a move to preempt them would test the limits of the Tenth Amendment restrictions on federal authority. See National League of Cities v. Usery, 426 U.S. 833 (1976).

The Supreme Court's opinion relied heavily on its interpretation of Congressional intent in the Clean Water Act's savings clause, § 505(a). The Court read the language, "Nothing in this section shall restrict any rights which any person... may have under any statute or common law..." to mean only that section, and not the Act itself. However that section contains the savings clause for the Act; Congress apparently meant by it that nothing in the Act was to restrict existing rights. The word 'Act' should be substituted for the word 'section' to prevent further confusion.

It is significant that EPA not only did not disapprove the common law remedy in City of Milwaukee, but expressed active support of it, through the participation of the United States as amicus in support of Illinois. EPA itself has pressed federal common law nuisance claims in the past. United States v. Outboard Marine Corp., 12 ERC 1348 (N.D. Ill. 1978); United States v. Hooker Chemicals & Plastics Corp., et al., Civil Actions Nos. 79-987, 79-988, 79-989 and 79-990 (W.D.N.Y.).

A legal issue which is important to the states and was not addressed by the majority of the Supreme Court in City of Milwaukee is the states' right to a federal forum to settle interstate disputes. Where a statute does not provide a remedy for an interstate environmental problem, the Supreme Court held in Illinois v. Milwaukee(I) that

nuisance provides federal question jurisdiction in the district courts, pursuant to 28 U.S.C. § 1331. Illinois v. Milwaukee, 401 U.S. 91, 98 (1971). Since states are not citizens for purposes of diversity jurisdiction,* a broad repeal of the federal common law of nuisance removes the only nonstatutory basis for federal jurisdiction over states and thereby raises a serious federalism question under the Constitution.

In its first Illinois v. Milwaukee decision, the Supreme Court discussed this point, citing Missouri v. Illinois, 200 U.S. 496 (1906). The Court there had held that a federal common law of nuisance must exist to redress an affront to a state's physical integrity, such as water pollution, which is caused by a source in a neighboring state. Writing for the Court, Justice Holmes addressed this basic requirement of federalism. He reasoned that a sovereign which was not a member of the Union might go to war with a neighbor to end such a nuisance. The states, in forming the Union, relinquished this prerogative in exchange for a federal judicial forum. 200 U.S. at 520-21 (1905). In a later air pollution case, Justice Holmes described a suit by a state for an injury to it as brought in its capacity as quasi-sovereign:

> ...In that capacity the State has an interest independent of and behind the titles of its citizens in all the earth and air within its domain. It has the

*Ohio v. Wyandotte Chemical Corporation, 401 U.S. 493, 498, n. 3(1971); Postal Telegraph Cable Co. v. Alabama, 155 U.S. 482, 487 (1894).

> last word as to whether its mountains shall be stripped of its forests and its inhabitants shall breathe pure air...
>
> ...When the States by their union made the forcible abatement of outside nuisances impossible to each, they did not thereby agree to submit to whatever might be done. They did not renounce the possibility of making reasonable demands on the ground of their still remaining quasi-sovereign interests; and the alternative to force is a suit in this court.
>
> Missouri v. Illinois, 180 U.S. 208, 241. Georgia v. Tennessee Copper Co., 206 U.S. 230, 237 (1907).

Accord, Kansas v. Colorado, 206 U.S. 46, 98 (1907); New York v. New Jersey, 256 U.S. 296, 301-2 (1921); Nebraska v. Wyoming, 325, U.S. 589 (1945); State of Texas v. Pankey, 441 F. 2d 236 (10th Cir. 1971). The Court has recognized that relegation to the neighboring state's courts is not adequate:

> The object of vesting in the courts of the United States jurisdiction of suits by one State against the citizens of another was to enable such controversies to be determined by a national tribunal, and thereby to avoid the partiality, or suspicion of partiality, which might exist if the plaintiff state were compelled to resort to the courts of the state of which the defendants were citizens.
>
> Wisconsin v. Pelican Ins. Co., 127 U.S. 265, 289 (1888).

Without the federal common law of nuisance, states would be relegated to the state court system to settle interstate common law nuisance disputes. This situation is not appropriate in our federal system. Pursuant to the Constitution the states should continue to have available to them a federal forum for interstate disputes.

In City of Milwaukee the Supreme Court read the Clean Water Act to implicitly repeal the federal common law of nuisance. The Court did this in spite of the principle of law that repeals by implication are not favored.* Federal common law is a necessary and basic element of our system of environmental law, as it is in other areas of federal interest.**

Because the Court relied for its holding on its own interpretation of Congressional intent, Congress may change its result simply by clarifying the Act's savings clause. Congress should do so and preserve the federal common law of interstate nuisance.

*As the D.C. Circuit Court of Appeals has phrased it, "... [a] statute will not be construed as taking away a common law right existing at the date of its enactment, unless that result is imperatively required; that is to say, unless it found that the pre-existing right is so repugnant to the statute that the survival of such right would in effect deprive the subsequent statute of its efficacy... ." Sierra Pacific Power Co. v. Federal Power Commission, 223 F. 2d 605, 607 (D.C. Cir. 1955) aff'd 350 U.S. 348 (1956). And see, Texas & Pacific Railway v. Abilene Cotton Oil Co., 204 U.S. 426, 437 (1907); Federal Power Commission v. Niagara Mohawk Power Corp., 347 U.S. 239, 252-53 (1954).

**E.g., Common law continues to play a vital role in the area of pension rights, and in federal maritime law. See, Moragne v. States Marine Lines, 398 U.S. 375, 392 (1970) ("... It has always been the duty of the common-law court to perceive the impact of major legislative innovations and to intervene the new legislative policies with the inherited body of common-law principles -- many of them deriving from earlier legislative exertions.")

STATEMENT OF THE

NATIONAL FOOD PROCESSORS ASSOCIATION

1982 AMENDMENTS TO THE FEDERAL WATER POLLUTION CONTROL ACT

The National Food Processors Association (NFPA) is pleased to submit comments on S. 2652, the Administration's proposal to amend the Federal Water Pollution Control Act (The Clean Water Act). NFPA represents about 600 member companies that pack processed-prepared fruits, vegetables, meats, fish and specialty products, including canned, frozen, dehydrated, pickled and other preserved food items. Also included among the Association's members are companies that provide equipment, supplies and services to the food processing industry.

The food processing industry requires dependable and abundant supplies of potable water for use within its plants, and a major segment of the industry depends upon good water quality for the production of reliable sources of wholesome fish and shellfish. Thus, NFPA members support the Act's goal of attaining chemical, physical and biological integrity of the nation's waters. This national goal requires industrial and municipal dischargers to provide effective treatment of the wastewaters before discharge into these waters. To the best of our knowledge, all NFPA member food processing

plants are in compliance with the provisions of their individual NPDES permits.

With every good statute, implementation reveals areas where modifications are necessary to ameliorate problems encountered during administration and enforcement. We believe that the Environmental Protection Agency (EPA) has done a good job of identifying most of the areas where amendments are needed. We commend Deputy Administrator Dr. John W. Hernandez, Jr. for his effort to work with all segments of the regulated community to develop the Administration's recommendations. We are pleased to take this opportunity to state our views on those recommendations.

Section 1. AUTHORIZATION

NFPA supports reauthorization of the Federal Water Pollution Control Act, but has no position on timing or funding levels.

Section 2. BAT/BCT COMPLIANCE DEADLINE EXTENSION

NFPA supports extending the deadline for compliance with BCT effluent guidelines from July 1, 1984, to July 1, 1988. The Agency is not expected to issue final BCT effluent guidelines for at least another year. If the final BCT guidelines require greater treatment than now in place the additional time will be needed for compliance.

Section 3. MUNICIPAL DEADLINE

NFPA supports allowing all POTWs not in compliance with applicable secondary treatment requirement or water quality based effluent limitations to apply for an extension to 1988.

Section 4. ENVIRONMENTAL MODIFICATION FEES

No Position

Section 5. NEW SOURCE PERFORMANCE STANDARDS

NFPA supports amending the definition of "New Source" so that New Source Performance Standards (NSPS) are applicable after issuance of the final regulation rather than the proposed.

Section 6. BAT/BCT PROMULGATION DEADLINE EXTENSION

NFPA supports allowing the Agency additional time to develop and issue BAT and BCT effluent quidelines.

Section 7. PRETREATMENT

Since NFPA members discharge traditional conventional pollutants only, they would not be affected by the categorical pretreatment regulations. However, NFPA supports amendment of the Act to provide local POTW officials the authority to be more flexible in their pretreatment requirements if they can demonstrate to the Agency that water quality standards will continue to be met without impairment of sewage sludge usage.

Section 8. ADMINISTRATIVE CIVIL PENALTY AUTHORITY

NFPA opposes this amendment and urges its deletion. The civil penalty amendment to section 309 would provide EPA the authority to administratively assess civil penalties. Such authority would be subject to abuse. There are no procedural safeguards to protect companies from unwarranted and unjustified penalty assessments and EPA action would be exempt from the Administrative Procedures Act. We believe the current Act provides sufficient enforcement authority.

Section 9. FELONY SANCTIONS

NFPA also opposes the felony sanctions amendment to section 309 which would establish additional criminal penalties for "any person who (A) negligently violates" sections of the Act "or who (B) negligently introduces into a sewer system ...any pollutant or hazardous substance which causes or may reasonably be anticipated to cause personal injury or property damage or causes such treatment works to violate any effluent limitation...."(emphasis added). This language is too vague. The terms "negligently" and "may reasonably be anticipated to cause" are unclear and subject to abuse by regulatory officials. NFPA believes the current Act provides the Agency and the states with sufficient authority to punish violators of the Act and urge the deletion of this section.

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Section 10. FEDERAL FACILITIES POLLUTION CONTROL

No Position

Section 11. THERMAL DISCHARGES

No Position

Section 12. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT TERM EXTENSION

NFPA supports the proposed amendment to extend the present term of NPDES permits from 5 to 10 years. We concur with the Agency that an extension of the permit term will reduce the annual permitting workload of federal and state agencies and provide more certainty to permit conditions which could lead to investments in appropriate pollution control.

Section 13. PARTIAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM APPROVAL

No Position

Section 14. DAMS

No Positon

Section 15. MUNITIONS

No Position

There are three additional issues NFPA would like to discuss. The first two can be considered during markup of the Administration bill; we believe the third worthy of the Committee's attention in its oversight of EPA's administration of the Clean Water Act.

PRETREATMENT SHOULD NOT REPLACE SECONDARY TREATMENT

Present practice by some EPA regional offices contravenes the intent of Congress on wastewater treatment.

Congress has taken the position which NFPA supports, that conventional industrial wastewater should be treated by the local POTWs as the Conference Report accompanying the 1972 Act clearly stated:

> "Pretreatment of biological waste that is compatible with the treatment provided by a publicly owned waste treatment plant into which such waste is introduced may not be necessary... In no event is it intended that pretreatment facilities be required for compatible wastes as a substitute for adequate municipal waste treatment works." (Leg. History; 1972 FWPCA; Vol. 1; Page 313)

Some EPA regional offices have ignored the intent of Congress and have encouraged non-complying POTWs to require their industrial dischargers of conventional pollutants to pretreat as a means for the POTW to come into compliance. NFPA believes that EPA's regional offices should be directed to

encourage compliance by planning, designing, and constructing the facilities needed for the proper treatment of the combined and compatible industrial and municipal wastes. We therefore, urge the Committee to reiterate the aforementioned intent of Congress in its report on the Federal Water Pollution Control Act reauthorization.

FEDERAL COMMON LAW NOT NEEDED

An amendment has been proposed that would reverse the U.S. Supreme Court's 1981 decision in City of Milwaukee v. Illinois and allow court actions to be brought against permittees under the resource of Federal Common Law. NFPA opposes this amendment. We agree with the Court's decision that Federal Common Law is not necessary in the Federal Water Pollution Control Act "because the law is so comprehensive". Recipients of permits issued under the Clean Water Act must be assured that commitments and expenditures made to comply with NPDES permit requirements will be set for a reasonable period of time and not subject to change without due course.

EPA currently has the authority to modify or terminate a permit when conditions are not met. Therefore, we believe the Act contains sufficient opportunity for interested parties to express their views when requesting the permit and again when they must seek renewal.

SEWAGE SLUDGE APPLIED TO CROP LAND

Sewage sludge disposal on land used for the production of foods for human consumption is becoming more prevalent. NFPA is concerned that current regulatory requirements for such disposal do not adequately safeguard the public health.

Some NFPA members have expressed concern over the use of sewage sludge in the production of foods for human consumption. Sewage sludge can contain human pathogens that could infect workers and others who must enter the fields and may contaminate products for fresh or frozen consumption. It may also contain heavy metals and other toxics (e.g., PCBs) that could appear as residues in or on the foods.

The Federal Government has recognized some of these concerns. In January 1981, the EPA, FDA and USDA jointly issued a document establishing guidance on the use of sewage sludge in the production of fruits and vegetables. Entitled Federal Policy and Guidance, Land Application of Municipal Sewage Sludge for the Production of Fruits and Vegetables, EPA Report No. SW 905, the guidance document states that if the procedures contained therein are followed, the resulting crops should be safe for human consumption. However, the document contains the following disclaimer: "The Federal Government cannot offer any indemnity against product recalls, seizures, or other enforcement action."

Some food processors believe that following the

procedures outlined in the federal guidance document will not assure that foods harvested from land treated with municipal sewage sludge will meet established FDA standards for safety. Accordingly, some companies have informed their growers that they will not accept crops grown on land which has been treated with sewage sludge.

In light of these concerns, last fall the NFPA Board of Directors adopted a position stating that until the questions regarding safety of such use are resolved NFPA cannot endorse the application of municipal sewage sludge to land that may or will be used in the production of foods for human consumption. NFPA subsequently urged the EPA, USDA, and FDA to establish an interagency task force to develop definitive policies and regulations which identify the specific conditions under which municipal sewage sludge can be safely applied to land used in the production of foods for human consumption. We find the response by the agencies that they do not intend to establish a formal interagency task force regretable.

Policy of

NATIONAL FOOD PROCESSORS ASSOCIATION

on

Sewage Sludge Applied to Croplands

"The National Food Processors Association (NFPA) recognizes that the application of sewage sludges generated by publicly owned treatment works (POTWs) to croplands can be a beneficial use when the proper conditions exist and the sludges have been determined to be safe for the use intended. The NFPA, however, has serious concern that sludges produced by POTWs may contain heavy metals, human pathogens and toxic compounds which could have potential health effects on the consumers of foods produced on lands to which such sludges have been applied. Therefore, NFPA cannot endorse the application of municipal sludge to land that may or will be used in the production of foods for human consumption until the questions regarding its safety for such use are resolved. Therefore, NFPA urges the EPA, USDA and FDA to establish an interagency task force to develop definitive policies and regulations which identify the specific conditions under which municipal sludges can be safely applied to land on which foods for human consumption will be produced. Furthermore, NFPA recommends that the interagency task force seek the advice and counsel of NFPA and other groups representing agricultural, industrial and public interests in the development of appropriate policies and regulations."

National Association
of Manufacturers

Resources and Technology Department

Energy
Environmental Affairs
Natural Resources
Innovation, Technology & Science Policy

July 29, 1982

The Honorable John Chafee
Chairman, Subcommittee on
Environmental Pollution
Committee on Environment
and Public Works
United States Senate
4204 Dirksen Senate
Office Building
Washington, DC 20510

Dear Chairman Chafee:

On July 28 and 29, 1982, you presided at hearings on the reauthorization of the Clean Water Act. The National Association of Manufacturers was unable to testify on the subject, and asks that the attached statement be made a part of the record.

Respectfully,

Mark N. Griffiths

Mark N. Griffiths
Associate Director
Environmental Affairs

MNG/lll

Attachment

1776 F Street, N.W.
Washington, D.C. 20006
(202) 626-3700

STATEMENT

OF

NATIONAL ASSOCIATION OF MANUFACTURERS

SUBMITTED TO

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT & PUBLIC WORKS

U. S. SENATE

JULY 29, 1982

STATEMENT
OF
NATIONAL ASSOCIATION OF MANUFACTURERS
SUBMITTED TO
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT & PUBLIC WORKS
U. S. SENATE
JULY 29, 1982

The National Association of Manufacturers represents approximately 11,000 member companies which employ 85 per cent of the country's industrial labor force and provide over 80 per cent of the nation's manufactured goods. Over 80 per cent of NAM's members are generally classified as small businesses. NAM is affiliated with an additional 158,000 businesses through our Associations Department and the National Industrial Council.

In January of this year, NAM's recommendations for essential changes in the Clean Water Act, a product of nearly a year's effort, were published by our Environmental Quality Committee. This publication discusses in some detail the reasonable and needed changes that will strengthen the Clean Water Act while enhancing our ability to meet our national water quality objectives in a more efficient and effective manner. A copy of this document is attached for the record.

The Environmental Protection Agency has recently transmitted to Congress the Administration's recommended amendments to the Clean Water Act (S. 2652, H. R. 6670). The majority of NAM's comments will be directed toward the provisions of this bill.

Congress Must Recognize that Industrial Compliance with Clean Water Act Requirements has been Unsurpassed

There are four basic and distinct sources of water pollution in this country: (1) natural, "background" pollutants that appear in our rivers and streams not as a result of human activity; (2) "non-point sources" of water pollution that are a result of runoff from agricultural, construction, silvicultural and other activities; (3) publicly-owned treatment works (POTWs) that treat wastewater from industrial, residential, commercial and institutional sources and then discharge the treated effluent; and, (4) industrial sources that treat their own wastewater before discharging it. Introduction of natural pollutants cannot be controlled and this natural background should be taken into consideration in any control program. Non-point sources have long been recognized as being a major contributor to water pollution, but have not been effectively addressed. POTWs have a rather spotty performance record, and Congress has rightfully begun to take steps to improve it. Of the four sources, only direct industrial dischargers have done the job required of them by Clean Water Act regulations.

EPA has reported that in the case of POTW, for instance, at any given point in time 50 to 75 per cent of the plants are in violation of their permits. A November 1980 General Accounting Office Report surveyed 242 POTW plants in 10 states, and found that 87 per cent were in violation of their permit and 31 per cent, in GAO's opinion, were in serious violation. Direct industrial dischargers, on the other hand, report a 90-95% plus

permit condition compliance rate. From this, it is obvious that the most hopeful areas for continued dramatic improvement in water quality lie not with direct industrial dischargers, but with POTWs.

NAM believes that the Administration proposal generally reflects this realization. However, we would like to point out a few undesirable provisions of S. 2652.

Sections 8 and 9 of the Administration Bill--Civil and Criminal Penalties Go Too Far, Place Too Many in Jeopardy

Section 8 gives the EPA Administrator discretionary authority to assess civil penalties of up to $10,000/day for certain Clean Water Act violations, while Section 9 establishes mandatory felony penalties of up to $50,000/day and/or imprisonment for up to two years for other, more serious violations. The Administrator would have no discretion in prosecuting Section 9 offenders.

NAM questions the necessity for creating these unduly severe remedies for violations of what is supposed to be an environmental protection statute and not part of the criminal code. We stand strongly opposed to these provisions, and request that the Environmental Protection Agency document thoroughly the need for such draconian penalties. Finally, in the unhoped for event that these provisions become law, it should be made irrefutably clear that they apply across the board to all citizens and municipalities as well as to industrial dischargers.

Section 4 of the Administration Bill--Charging Fees for Legitimate Government Functions Could Remove Some of the Incentive for Improving Water Quality and Does Not Address the Real Problem

Section 4 of the bill provides the EPA Administrator with the authority to charge fees for processing and reviewing applications to modify or exempt certain effluent limitations, standards and requirements. The current statutory process of granting such modifications and exemptions, it should be noted, have built-in safeguards that assure that water quality efforts will not in anyway be diminished. Moreover, certain modifications could have and have had beneficial water quality results. By charging a fee (the amount of which has so far been unspecified) applications for innovative modifications might be reconsidered, withdrawn or never made.

In any event, this effort to offset EPA's paperwork costs should be viewed as a revenue-raising measure and thus considered by the appropriate committees of Congress. A better way of reducing EPA's (and industry's) costs would be to go to the root of the problem--the existing unnecessary and time-consuming paperwork requirements.

Steps in the Right Direction

Our major objections aside, NAM believes that there are several provisions of the administration proposal that represent steps in the right direction.

First, providing for more local flexibility, responsibility and authority to POTWs in administering their pretreatment programs is an improvement in the present program. Heretofore,

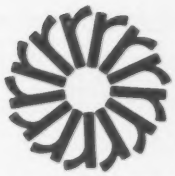
POTWs had little say in how best to design and implement pretreatment systems suited to unique local needs.

Second, extending the life of NPDES permits from five to ten years will help to reduce some of the paperwork backlog of EPA and the states, promote stability in technology requirements and relieve companies of expensive, time-consuming paper chases.

Third, extending the deadlines for industrial compliance with Best Available Technology requirements is a recognition that, for the overwhelming majority of direct industrial dischargers, there is simply not enough time under present deadlines to meet effluent limitations that have not yet been developed.

Fourth, and finally, making new source performance standards applicable after issuance of final rather than proposed regulations will remove many of the uncertainties created by current law. This revision, we feel, will insure that final NSPS standards will be available and applicable as new construction is begun.

We thank you for this opportunity to present the views of NAM, and look forward to working with the Subcommittee on these important matters.



national association of regional councils

1700 K St., N.W., Washington, D.C. 20006 • Area Code (202) 457-0710

RICHARD C. HARTMAN, Executive Director

STATEMENT OF

IRA JACKSON, PRESIDENT
NATIONAL ASSOCIATION OF REGIONAL COUNCILS

ON REAUTHORIZATION OF THE
CLEAN WATER ACT

SUBMITTED TO THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENTAL AND PUBLIC WORKS

Mr. Chairman, the National Association of Regional Councils appreciates the opportunity to present its views on legislative proposals to revise and reauthorize the Clean Water Act.

Regional councils are areawide organizations of general purpose local governments encompassing a total regional community. Their primary purposes are to increase communication, cooperative decision-making and coordination among local governments, and to develop policies and programs to meet mutual problems. Regional councils have been established to deal with areawide problems such as housing, community and economic development, environmental quality, transportation and public safety. Regional councils exist today in all the nation's major metropolitan areas, including the 37 interstate ones. The National Association of Regional Councils represents over 350 Regional Agencies in both Rural and Metropolitan areas throughout the United States. Most of the designated 208 water quality planning organizations are members of our association.

NARC's Board of Directors recently reassessed the Clean Water Act in light of the potential local, state and federal resources available to attain its goals and objectives. We reaffirmed our support for the Acts overall objectives but noted that Congress needs to modify water quality deadlines to reflect the reduced level of financial resources available to state and local governments. There is also a need to give local authorities more flexibility in the method of meeting discharge limitations. The legislation sent to Congress by EPA on May 25 contains a number of features which we believe will help continue progress toward cleaner water and make administration of the Act more reasonable and realistic.

NARC supports the provision allowing all publicly owned treatment works not in compliance with applicable secondary treatment requirements to apply for an extension to 1988. The construction grants amendments passed by Congress last year have already extended this deadline for certain categories of POTWs. We think this provision is realistic given the fact that about half the municipal discharges in the nation have yet to comply with the 1977 treatment requirement. This situation exists for many reasons not the least of which is that the clean-up task has been underestimated right from the beginning.

NARC supports provisions in the administration proposal which would allow exemptions to the current pretreatment requirements when it can be demonstrated that equivalent controls will result. Well run modern municipal secondary treatment works employing biological systems do a much better job of removing toxic chemicals than had been previously anticipated. We believe it makes sense for EPA to exempt industries and municipalities from making very expensive investments in pretreatment facilities if it can be demonstrated that current facilities or slightly modified ones can do the same job. We at the local/areawide level have a commitment to clean water which is no less than the members of this committee. If a community neglects its responsibilities under this provision, EPA has adequate enforcement powers through the NPDES permit system. However, we feel the vast majority of local governments are responsible and this flexibility could prove vital to the economic wealth of many communities.

We sincerely feel that our water quality problems, particularly those related to non point sources, cannot be addressed by total reliance on capital - intensive "technological" solutions. In many instances (such as the one in Minneapolis - St. Paul cited by the House Subcommittee on Oversight and Review, Report 96-71, Implementation of the Federal Water Pollution Control Act, p. 23) EPA is requiring

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local communities to invest in expensive advanced treatment when there is significant evidence that it will not result in appreciable water quality improvement. Therefore, NARC feels in revising the Act, Congress should give states and local communities the flexibility to establish water quality standards that recognize certain water bodies should be classified for uses that do not strictly attain the fishable, swimmable goals where the attempt to achieve such a standard will result in great economic harm to the community. In the event, that the receiving water must be brought to fishable, swimmable standards, the law should encourage states and local governments to achieve the standard in the most cost-effective manner. In the case of Minneapolis - St. Paul, it would be non-point source management rather than structural.

NARC also supports provisions of the legislation to extent the present National Pollutant Discharge Elimination System (NPDES) permit term from 5 to no more than 10 years. There is a backlog of some 60,000 permits which expire and require renewal or modification. There is an urgent need to extend the compliance schedules in many of the permits. These cannot be met with the recent reduction of federal resources. Local communities and metropolitan areas might be restricted from further growth if the effect of funding cutbacks on the municipal treatment construction program are not recognized. Extension of the permit term would also help EPA and state agencies manage their work load. It would help municipalities plan their pollution control expenditures with more certainty.

Finally, NARC supports extension of the Act for an additional five years. We think a longer extension will inject more certainty in the program and give EPA and municipalities a good opportunity to make progress toward remedying the problems which have been pointed out by this committee and others. At

some point, NARC believes the Congress should review the Act's goal of "fishable, swimmable" waters by 1983. The attainment of this goal by 1983 or any other date is highly problematic. Rather than maintaining a single goal for application everywhere regardless of cost, practicality or natural limitations, Congress should look toward establishing goals and standards which take into account local needs and uses. Further, these goals and standards have to be realistically adjusted to account for reduced government resources at all levels. We believe failure to come to grips with this issue will pose serious legal problems for local and state governments in the future.

Thank you.

NATIONAL
COAL
ASSOCIATION

COAL

CARL E. BAGGE
President
(202) 463-2647

July 29, 1982

Honorable John H. Chafee
Chairman, Subcommittee on Environmental
Pollution
Committee on Environment and Public Works
United States Senate
4204 Dirksen Senate Office Bldg.
Washington, D.C. 20510

Dear Mr. Chairman:

I would like to commend you for holding hearings this week on the reauthorization of the Clean Water Act.

While the National Coal Association believes that essential elements of the Clean Water Act are sound, we have learned from experience over the last ten years that some elements of the Act are in need of revision. In this regard we would like to submit for the hearing record the attached statement and detailed recommended amendments. We feel that if these amendments were adopted they would serve to clarify the original Congressional intent of the Act, streamline the administrative process and bring the roles of the federal government and the states back into balance. We also feel that these principles can be accomplished while retaining our nation's commitment to clean water.

If you or your staff have any questions regarding our statement and recommendations, please feel free to call Joe Mullan, Sr. Vice President for Environmental Affairs or Susan Carver in our Congressional Affairs office.

Sincerely,

Carl Bagge

Carl E. Bagge

1130 Seventeenth Street, N.W.
Washington, D.C. 20036-4677

(202) 463-2625

NATIONAL COAL ASSOCIATION

STATEMENT

OF

JERRY L. LOMBARDO

REPRESENTING

THE

NATIONAL COAL ASSOCIATION

ON

AMENDMENTS TO THE

CLEAN WATER ACT

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

July 29, 1982

WASHINGTON, D.C.

Mr. Chairman, I am Jerry Lombardo, Director of Environmental Affairs, Island Creek Coal Company. I am appearing on behalf of the National Coal Association, which represents coal producers and sellers and other organizations associated with the American Coal Industry.

Mr. Chairman, you deserve the highest commendation for holding these oversight hearings on the Clean Water Act. Your leadership in assuring that our Nation's water resources are protected and properly developed is well-known and fully appreciated in the coal industry.

Mr. Chairman, the coal industry supports the essential elements in the Clean Water Act and believes they are sound. Yet, over the ten-year life of the Act, experience has been a good teacher. Changes can be made to make the Act more effective, more responsive, while strengthening the national commitment to clean water.

Today, I will very briefly outline the coal industry's changes to the Act, but also ask that our detailed revisions be included in the formal record.

Mr. Chairman, the Clean Water Act establishes the goal to reach "fishable/swimmable" waters by 1983, and to eliminate pollutant discharges by 1985. Also the Act requires phased in technology-based effluent limitations, and supplemental controls, where necessary, to achieve the desired water uses. . . .

To reach these goals, the Act calls for a comprehensive permitting program, which specifically prescribes a careful balance of regulatory authority between the Federal Government and the states.

When the Act was passed, Congress set up the National Commission on Water Quality to examine the Act's effectiveness.

Among other things, the Commission made two significant recommendations which the coal industry also strongly supports. They are:

- The goal of eliminating pollutant discharges should be refined. Mr. Chairman, eliminating effluent discharges is widely-recognized as unrealistic, and economically unsound.
- The regulatory authority of the Federal Government and the states should be refined. The coal industry believes, that too much control has flowed to the Federal Government, which is contrary to the Act's original intent.

To these recommendations the coal industry would add a third: The Environmental Protection Agency's technical and scientific performance in setting water quality standards must be improved.

NCA Recommends That the Following Specific Changes to the Act Be Incorporated

The Zero Discharge Goal; Section 101(a)(1)

The Act presently requires that all pollutants discharged into navigable waters be eliminated. We believe that the Act should be changed to require that pollutants in harmful quantities discharged into navigable waters be eliminated.

Conforming changes should also be made in other sections of the Act where the zero discharge goal is mentioned. The phrase "consistent with the goals of this Act" should be substituted throughout the Act.

The Fishable/Swimmable Goal; Section 101(a)(2)

We believe this section must be amended to clarify the national goal of water quality. It must be clear that the goal to support fish, shellfish and wildlife and to assure that water is suitable for recreational uses is to be achieved only to the extent that it is economically and technically feasible. Also, the schedule for achieving that goal should be reasonable.

Water Quality Criteria and Standards; Section 303 and 304

"Water Quality Criteria" and "Water Quality Standard" should be defined to clarify their meaning. The roles of the Federal Government and states need to be spelled out. "Water Quality Criteria," for purposes of Section 304, should be defined as theoretical pollutant levels developed by EPA as technical guidance for permit writers and standard-setting authorities. "Water Quality Standard" in Section 303, should be defined as an acceptible pollutant level which corresponds to the particular water body involved. The standards should be set by the states and reflect site-specific water characteristics.

Applicability of Water Quality Standards

1. Congress should amend the Clean Water Act to exclude intermittent streams from federal water quality standards.

2. Congress should require EPA to demonstrate clearly -- by a preponderance of evidence -- that the benefits to society exceed the costs before water quality limitations more stringent than the regulations prescribing Best Available Technology (BAT) are imposed.

National Standards of Performance: Definition of "New Source; Section 306

Amend Section 306(a)(2) to provide that a new source is any source where construction has begun after publication of final regulations.

Enforcement of State-Issued NPDES Permits; Section 309

Amend Section 309 to prohibit EPA from bringing actions for permit violations in approved states. EPA retains oversight responsibility because the agency can withdraw NPDES authority for cause.

Duration of National Pollution Discharge Elimination System (NPDES) Permits; Section 402

Amend the Act to allow issuance of an NPDES permit for a minimum of 10 years. This permit should not be reopened except in specified circumstances, such as provided in Section 307 of the Act.

Permits for Dredged or Fill Material; Section 404

The Corps of Engineers should have exclusive authority to grant, to supervise, and to enforce the 404 permit program. Sections 404(c) and affected subsections should be amended accordingly.

The life of the permit should be extended from 5 years to 10 years or more in Section 404(e)(2), and Congress should direct

the Corps of Engineers to process dredge and fill permit applications within 90 days.

General Definitions - "Navigable Waters" and "Waters of the United States"; Section 502

This section should be amended as follows: The term "Navigable Waters" means only those waters that are currently used or are susceptible to use in their natural condition, or by reasonable improvement, to transport interstate or foreign commerce, shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, and including wetlands both contiguous and immediately tributary to navigable waters.

Add a new definition of Section 502 to read: The term "waters of the United States" means (1) navigable waters; (2) tributaries of navigable waters; (3) interstate lakes, rivers and streams; and (4) intrastate lakes, rivers and streams (A) used by interstate travelers for recreation and other purposes or (b) which are a source of fish or shell-fish sold in interstate commerce and (c) territorial seas.

Mr. Chairman, these amendments are needed to eliminate the present confusion about the limits of regulatory authority.

General Definitions - Definitions of "Discharge of Pollutants" and "Point Source" and "Pollution"; Section 502

Amend Section 502(12), (14) and (19) of the Clean Water Act to read as follows:

(A) The term "discharge of a pollutant" and the term "discharge of pollutants" each means (a) any net addition of any pollutant to waters of the United States from any point source; (b) any net addition of any pollutant to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

(B) The term "point source" means any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include surface water diversions; shallow ground water diversions, discharge from dams, ponds, or structures that serve only to control stream-flow, storm water runoff or non-point source pollution; or return flows from irrigated agriculture.

(C) The term "harmful quantities" means the discharge of pollutants in such quantities as to violate a water quality standard or to preclude the downstream designated use of the receiving stream.

Administrative Procedure and Judicial Review; Section 509

This section should be amended to provide that any final action of the Administrator not specified in Subsection (B)(1)(a)-(f) shall be reviewable in the United States District Court for the district in which the petitioner resides or transacts business.

NEPA Review for New Sources; Section 511

Amend Section 511(c)(1) of the Clean Water Act to exempt NPDES permitting of new sources from environmental impact

statement requirements under the National Environmental Policy Act.

Each of these recommendations is explained in detail in NCA's package of proposed amendments.

Mr. Chairman, on behalf of the National Coal Association, I appreciate the opportunity to testify before you on this critical issue. I will be glad to answer any questions.

National Solid Wastes Management Association

Written Testimony to the

Environmental Pollution Subcommittee
Senate Committee on Environment and Public Works

The Clean Water Act

Hearings of July 21, 22, 28 and 29, 1982

August 1982

- COLLECTION COMMITTEE
- INSTITUTE OF CHEMICAL WASTE MANAGEMENT
- INSTITUTE OF RESOURCE RECOVERY
- INSTITUTE OF WASTE EQUIPMENT DISTRIBUTORS
- INSTITUTE OF WASTE TECHNOLOGY
- LANDFILL COMMITTEE
- WASTE EQUIPMENT MANUFACTURERS INSTITUTE

We appreciate the opportunity to submit testimony for the record on the reauthorization of the Clean Water Act.

The Institute of Chemical Waste Management (ICWM) of the National Solid Wastes Management Association (NSWMA) comprises firms involved in the treatment and disposal of hazardous waste. Overall, NSWMA represents more than 2,000 private companies providing waste management services.

The toxic pollutant management provisions of the Clean Water Act are of particular concern to us. We believe Congress should make no major changes in provisions dealing with either direct or indirect dischargers.

The business of the members of our Association is the environmentally safe treatment and disposal of waste. We therefore have a clear economic interest in laws which mandate strict pollution control. Our industry is also regulated, however, by the same federal laws which govern the manufacturing and other businesses more commonly thought of as the regulated community.

NSWMA worked aggressively for passage of the Resource Conservation and Recovery Act of 1976 (RCRA), the major federal law regulating solid and hazardous waste, and we support legislation currently before Congress to eliminate existing loopholes in that law. It is with that law that our expertise primarily lies. Both the Clean Water Act and Clean Air Act set up complex regulatory schemes combining both technology standards and standards for the receiving medium. In many ways, RCRA is much simpler and more stringent. For the most part, it is based on the concept of allowing no hazardous waste exposure to humans

and the general environment, not as a goal but as a standard to be fully implemented through recently promulgated regulations.

Despite the different regulatory control strategies governing disposal of waste in air, water and land, there is a substantial area of overlap. For example, in our industry a treatment plant for liquid hazardous wastes must obtain a NPDES permit if it discharges directly into navigable waters and comply with pretreatment rules if it discharges to a POTW.

Although Congress passed the Clean Water, Clean Air and Solid Waste Disposal Acts (as amended by RCRA) over a period of several years, this year practically every environmental law must be reauthorized. This gives Congress the ideal opportunity to consider the cumulative effect of the laws as they affect exposure of humans and the environment to toxic pollutants, and how relaxation in the requirements of the law governing one medium may affect where society's waste products are disposed of.

On this note, NSWMA has serious concerns over the Administration's proposals concerning "Best Available Technology" (BAT) for toxic water pollutants and for the pretreatment program. We view both proposals as a relaxation of environmental standards, and believe they would creat a bias towards disposal of waste into streams and rivers. We have always strongly supported a national environmental policy of stringent federal standards to serve as minimum requirements for state and local implementation to prevent inequities among discharges in different geographical areas. The Clean Water Act now contains the proper balance between controls based on technology and water quality standards. This

approach that Congress adopted in the 1970's should not be abandoned or weakened in the 1980's.

BAT

NSWMA believes EPA should be required to adhere to the deadlines it committed to in court for the promulgation of BAT effluent guidelines. Just because EPA has missed Congressional deadlines is no reason for Congress to ratify this tardiness. Industries should be required to comply "as expeditiously as possible," certainly no longer than three years from promulgation. A 1988 deadline which EPA recommends is not only longer than necessary but would create unequal compliance times among industries.

Pretreatment Provision

The concept of the pretreatment program is sound and should not be changes in legislation. The Administration's proposal to give full discretion to local POTWs would institutionalize a needless disparity between direct and indirect major discharges. POTWs have hardly been superior performers in meeting the terms of their NPDES permits even after the billions of dollars spent by the federal government on building and upgrading plants. We doubt whether these local agencies have the technical resources to design, implement and enforce such programs in the absence of national standards.

EPA states that POTWs would have incentives to enforce their programs because they would be held to the terms of their own permits. Few POTWs have toxic effluent limits in their permits now, and the Administration's proposal is vague as to how and when these limits would be set and attained. Finally, the process of enforcement on public

agencies is generally a drama of threats, promises and extensions, not fines and convictions as it is for private dischargers.

One overlooked issue is who should pay for the treatment of toxic pollutants. If stringent categorical and general pretreatment standards are retained, the cost of the treatment will be paid by the industry and the users of their products. If local POTWs are given a free hand, political and local economic conditions may lead them to the decision that the local taxpayers (and possibly the federal government) will pay for the treatment capacity to deal with toxic pollutants or that downstream human and aquatic life will suffer the costs of pollutant pass-through. It's extremely rare for POTWs to charge a surcharge for any toxic effluent in the waste stream of an indirect discharger.

Finally, we believe that toxic waste streams are more efficiently and effectively treated before their dilution in domestic sewage.

Conclusion

The Clean Water Act is working well; we are certainly making progress in cleaning up our rivers and streams. There is no reason to jeopardize the national policy that has served us well for 10 years. The burden of proof should be heavy for those that seek amendments to it, and we believe this proof can not be given for the toxic pollutants provisions when their implementation is still in their infancy.

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TESTIMONY OF
NEW YORK STATE COMMISSIONER OF ENVIRONMENTAL CONSERVATION
ROBERT F. FLACKE

BEFORE THE
UNITED STATES SENATE
COMMISSION ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

July 29, 1982

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Daniel M. Barolo, Director of the Division of Water. On behalf of Robert F. Flacke, Commissioner of Environmental Conservation for the State of New York. I am here to share with you New York's views relative to proposed amendments to the Clean Water Act. In our experience, the Act is fundamentally sound and has led to significant improvements in the quality of New York's and the nation's waters. My comments will focus on the Administration's proposed amendments now embodied in Senate Bill S.2652 and House of Representatives Bill H.R.6670, as well as other important areas of concern to New York not included in these bills.

Administration Proposals

1. Funding Authorizations (Section 106)

The 106 grant represents the primary source of federal funding to support water pollution control program implementation, exclusive of the construction grants program. To justify FY 1983 and possible future reductions in the 106 grant, the administration is promoting the use of 205(g) and new 205(j) funds. Both of these funding sources are tied to the Construction Grants appropriation which is now under severe scrutiny by both the Administration and Congress. If New York State were to condone reductions in the 106 grant by agreeing to the use of 205(g) and (j) funds to make up the loss, and if the Administration and/or Congress decide to ultimately terminate the Construction Grant program, we would be left with much reduced or eliminated 106 funds and no 205(g) or 205(j) funds.

In addition, the statutory language of 205(g) and 205(j) appears to limit the uses to which such funds could be expended, possibly precluding the suggested flexibility. Critical program activities such as monitoring, permit issuance, and compliance will be severely impacted if funding is reduced. The return of NPDES delegation is a distinct possibility.

Another, more basic concern, is one of withdrawing 106 funding at a time when the states are being encouraged to assume and administer additional federal program responsibilities, more complex and more costly to administer than traditional program activities. New York, as an example, feels it is essential to issue second round permits using "best professional judgment". This effort requires a better data base, greater expertise, and more field staff.

For these reasons, New York strongly opposes any reductions in 106 monies. We recommend that authorizations remain at the current level of

$75,000,000 and that Congress appropriate an amount equal to or greater than the FY 1982 level of $51,200,000.

2. Extend BAT/BCT Compliance Deadlines (Section 301)

New York will support extensions in BAT/BCT compliance deadlines, as long as we are assured that EPA will be given adequate resources and a clear mandate to develop the complex and badly-needed BAT standards. Control of toxics is of great concern to us and extended delays will impede our initiative to limit toxic substances in discharges. To point up New York's commitment to toxics control, DEC has already established a statewide effort to limit toxic discharges through the application of "best professional judgment".

EPA is considerably behind schedule in issuing national standards for toxic pollutants. It is likely that appeals and litigations will further delay the actual promulgation of these limitations. The law can recognize these facts by providing additional time to promulgate the standards in a more orderly, deliberate, and efficient manner.

However, Congress must keep in mind that protracted delays in issuing limitations can result in economic inequities between those states that continue to administer aggressive programs and those that wait for national standards. More importantly, there will be public health and environmental consequences if we fail to pursue aggressive management programs around a well-defined national framework.

New York supports the proposed extension of BAT/BCT compliance deadlines to July 1, 1988, contingent upon EPA promulgation of national standards by July 1, 1984.

3. Municipal Compliance Deadlines (Section 301)

The construction grant funding provided by the 1981 amendments to the Clean Water Act will be insufficient to provide grant assistance for all needed projects on a timely basis. It appears this situation will be further aggravated by the proposed reductions of the Administration. In addition, complexities of new requirements and fluctuating grant allotments to the states have added to uncertainties of project approval and funding at the municipal level, creating even greater delays.

Promulgation by EPA of a meaningful secondary treatment definition and articulation of an enforcement policy that recognizes the financial inability of municipalities to upgrade their treatment facilities without federal/state support are essential.

We endorse the Administration's proposal which provides municipalities with additional time to request an extension from the present compliance deadline of July 1, 1983 to July 1, 1988.

4. Environmental Modification Fees (Sections 301, 307, and 316)

Review and action on applications to modify or exempt certain effluent limitations, standards, and requirements takes considerable staff time and resources on the part of all regulatory agencies, whether it is EPA or states with delegated permit authority.

We agree with the concept of charges which are commensurate with the cost of providing the service. Regulations and policies should ensure that only eligible and efficient resource expenditures are charged the applicant. The law and regulations should be clear in establishing that delegated states have the authority to directly recover the costs for these services.

5. New Source Performance Standards (Section 306)

We agree with an amendment which redefines the term "new source" and makes new source performance standards applicable after issuance of final, rather than proposed, regulations. This would remove the uncertainty which can result when an industry initiates design and/or construction of treatment facilities based on proposed regulations and then is faced with changes in the final regulations which may cause significant technical problems and economic losses.

6. BAT/BCT Effluent Guideline Deadline Extension (Sections 304, 306, and 307)

EPA has experienced considerable difficulty in the timely development and promulgation of BAT/BCT industrial effluent guidelines. This is evidenced by court actions and the slippage in meeting both court-appointed and self-imposed agency deadlines. It is clear that the legislation should be amended to reflect a more realistic and attainable goal. With EPA's track record in this area, we wonder whether effluent guidelines can be promulgated by July 1, 1984 -- less than two years from now -- given the Administration's proposed reduction in the Agency's budget.

Delays to date have precluded states from adequately regulating toxic/hazardous discharges, creating confusion for industry, adversely affecting program credibility, and eroding professional staff morale. Any further slippage will have profound effects on the states' ability to adequately protect public health and the environment.

Since the present deadlines are obsolete, however, we accept the proposed amended date, provided Congress emphasizes to EPA the urgency of completing this effort according to schedule, and ensures that the agency receives sufficient funds to complete the work.

7. Pretreatment (Section 307)

New York is deeply concerned about the Administration's recommendation that categorical standards for industrial pretreatment be made optional. It is our judgment that allowing the EPA Administrator the discretion to

promulgate standards analogous to effluent limitations issued under Sections 301(b)(2) and 304(b) of the Act will seriously impede development of the states' pretreatment programs. While there certainly is a need for flexibility in developing these programs, the elimination of categorical standards will make implementation and enforcement of such programs extremely difficult. More importantly, without a national framework, toxic and hazardous pollutants will continue to be discharged to our waters, violating water quality standards and adversely affecting public health and the environment.

New York State supports the retention and use of the categorical standard approach to establish pretreatment limitations. The limited resources available to EPA should be directed toward development of limits for specific industrial categories and/or pollutants which are known to interfere with treatment plant operations, collect in sludges, or pass through secondary treatment facilities. EPA's capability of developing such standards in a timely fashion should be closely examined.

It is essential that the devlopment of categorical pretreatment standards, required by the Act, proceed in a timely fashion to assure implementation of effective local pretreatment programs. Provisions exist in the NRDC Consent Decree for exclusion of pollutant and industry subcategories where development of such categorical standards is not warranted. Therefore, flexibility presently exists and the proposed revisions are not necessary nor desirable. As always, we will be most willing to work with EPA in determining which standards are critically needed for successful state programs.

8. Administrative Civil Penalty/Felony Sanctions (Section 309)

Amendments are proposed to increase EPA's civil and criminal penalty authority for Act violations. New York supports these changes which will improve compatibility with state legal authority and, therefore, provide better opportunity for coordinated state/federal enforcement.

9. Federal Facilities Pollution Control (Section 313)

New York State cannot support this amendment, which would expand the authority to exempt selected federal facilities from Act requirements.

In regard to federal facilities, the 1977 amendments to the Clean Water Act provided for states with approved NPDES permit programs to issue permits to federal installations.

We also believe these amendments provide that federal installations be treated the same as state-owned and private facilities with regard to permit issuance and compliance inspection and monitoring. Section 308(c), however, was never amended to allow for inspection, monitoring, and entry into federal facilities by state regulatory agencies.

We recommend that Congress provide for state inspections and monitoring of federal facilities by amending Section 308(c) by deleting the phrase at the end of the paragraph: "except with respect to point sources owned or operated by the United States".

Where appropriate, confidentiality of information concerning federal facilities will be retained and respected.

10. Thermal Discharges (Section 316)

The proposed amendment modifies the environmental measure for thermal discharges from a single criterion of a balanced, indigenous population of shellfish, fish, and wildlife to the attainment of numerical thermal standards or protection and propagation of a balanced population of shellfish, fish, and wildlife. It also provides for the application of alternate mitigation measures alone or in combination with the best available technology, to minimize adverse environmental impacts of intake structures. We agree with this change, which provides more flexibility as to methodology, while retaining the essential objectives of the Act.

11. NPDES Permit Term Extension (Section 402)

This amendment provides for extension of NPDES permit terms from five years to no more than ten years.

The paper, time, and resources involved in issuing a NPDES delegated permit are considerable, both on the part of the regulating agency and the source owner. Permits for major sources now average thirty pages, four months processing time, and cost thousands of dollars to issue. Since DEC was delegated NPDES authority in October of 1975, over 7,000 dischargers have received permits. The first group of permits issued in late 1975 and those issued by EPA prior to delegation have expired and are now subject to renewal.

The original legal requirements for industry and municipalities under the 1972 amendments mandated various levels of treatment to be achieved by 1977 and 1983. The 1977 date was within a five-year time frame from the enactment date but the 1983 date was not. As a result, first time permits were issued by EPA and/or DEC with many expiring within a few years of the next plateau, i.e. July 1, 1983, with no legal right to include the 1983 requirements (besides the chronological difficulties, the lack of promulgated standards was paramount and much more highly publicized).

Now we are at a point where the so-called second round drafting of permits must be accomplished quickly to provide the permittee sufficient time to meet the original 1983 requirements (now proposed for extension to 1988). If permits are issued in a timely manner during 1982, the expiration would be in 1987 under the present five (5)-year duration limit. This end date may or may not be adequate should another amendment allow a further extension. The history of deadlines and amendments shows the five (5)-year time frame to be awkward and inappropriate.

Additionally, dischargers of a minor nature, which are about 80% of the permittees, need not be reviewed every five years. The unchanging nature of the waste streams and/or the lack of additional treatment requirements or need make permit renewal routine. The permit process would be enhanced

substantially if permit duration were allowed beyond five (5) years. As well, resources saved from permit administration of minor sources could be reallocated to higher priority program areas, such as inspection and monitoring of major facilities.

Lastly, the law gives us the right to modify a permit at any time for cause, thereby partially negating the need to reissue on a more frequent basis.

New York recommends that the maximum period for which NPDES permits are valid be lengthened to ten years, while retaining the right to review any permit more frequently.

12. Partial NPDES Program Approval (Section 402)

This amendment will allow EPA to make partial delegation of the permit program to states. This should provide the flexibility to allow a state to seek delegation of those parts of the program it can adequately administer. Although New York has had full permit program delegation since 1975, we support this change.

13. Dams (Sections 502, 402, and 303)

New York agrees with the definition of a dam as a nonpoint source subject to state control. The extra workload associated with permitting dams as point sources would severely strain our already overburdened staff and would detract from our priority efforts in toxic substances regulation, without providing any benefit to water quality. We fully support this amendment.

14. Munitions (Section 502)

We have no objection to the exclusion of munition from the definition of pollutants controlled under the Act.

Other Important Modifications Not Proposed by the Administration

There are two areas of concern in the Clean Water Act not addressed by the proposed amendments which New York State believes are important to clarify goals and direction, and improve state/federal relations as follows:

15. Goal of the Clean Water Act (Section 101)

National goals should have credibility. The presence in the Act of a specific date for compliance with the goal of eliminating all discharge of pollutants clearly indicates an intention and commitment to actually attain the goal. The complete elimination of the discharge of pollutants will not likely occur, however, considering the quantity, quality and character of pollutants contained in both point and nonpoint source discharges and the nature of our industrial society.

The elimination of pollutants from a discharge is certainly desirable where it can be accomplished practically. The report of the National Commission on Water Quality concluded that technology to eliminate point source discharges may eventually be available. However, the Commission admits that "the processes currently available are prohibitively costly, energy intensive, and create large quantities of residual which must be disposed of in some way other than into the water".

The Clean Water Act is silent on the incorporation of economic considerations in decision-making processes leading to compliance with the Act -- except for a specific reference in Section 302 dealing with discharge requirements more stringent than BAT. Over the past few years, more detailed information concerning the costs as well as the economic and social impacts of this goal have developed, and a restructuring of priorities has occurred in areas of social concern at the federal, state, and local government levels. We support appropriate, selective use of economic criteria, under the direction of the Congress, in the administration of Clean Water Act regulatory programs.

The goal of achieving fishable, swimmable waters by 1983 was laudable and much has been accomplished toward this end. However, the Act lacks a definition of "fishable, swimmable", and the phrase, "wherever attainable" has often been ignored, resulting in much confusion by regulators, dischargers, and the public. Since 1972, we have entered an era of awareness about "toxics" and increased concern about nonpoint source pollutants with their impact on fish and recreation. The scientific community does not have the answers to the synergistic, episodic, or chronic effects of the myriad toxic substances. Until they do, we believe the date of achievement of the goal cannot be predicted.

We recommend that Section 101(a)(1) be amended to read: "it is the national goal that, where technically and economically feasible, the discharge of pollutants be eliminated."

We also recommend that the phrase "be achieved by July 1, 1983" be deleted from Section 101(a)(2).

16. Dredge and Fill (Section 404)

We view continuation of Section 404 as absolutely necessary from a national perspective. This regulatory tool provides the only protection for vital wetlands in some states. Federal regulation also ensures equity across the nation so that no one state is placed at an economic disadvantage because it requires reasonable environmental protection while others do not.

Opponents of this program claim that it causes intolerable problems and unacceptable delays because of complex and time-consuming regulations and procedures. While the record does not bear out all of these claims, we recognize the value in streamlining the mechanics as much as possible as long as water quality and natural resource objectives are satisfied. We believe that the existing program can and should be made to work. There is no need for substantive change.

New York has an excellent set of environmental laws, including authority to protect tidal and freshwater wetlands. The Section 404 program could be streamlined considerably if delegation of responsibility to states like ours is made less burdensome from a bureaucratic and procedural aspect. If this were done, federal authority could still be retained in those states where it was needed.

We are in a better position to protect the resource and serve the public because of our local knowledge of conditions and needs. Duplicative state and federal permitting would be eliminated. The process would be faster because our laws require shorter time frames for permit issuance than federal regulations. There would be a reduction in the need for coordination. Finally, we could ensure better statewide consistency than occurs with six Corps Districts and two Divisions with jurisdiction in New York State.

Section 404 allows for state assumption, but the rigid regulations governing delegation contain too many unacceptable provisions. These include (1) continuing federal review of draft state permits -- thus there is no real delegation; (2) extensive notice requirements; and (3) mandatory time frames for federal review that conflict with state requirements; i.e., they are longer. Furthermore, there is no provision for federal funding of a state program.

Finally, there is no provision for state assumption of the Corps of Engineers permit program in Section 403 of the Rivers and Harbors Act. The two federal acts are duplicative in this regard. If Section 403 responsibilities were retained by the Corps, duplicative permit processes would still apply to 75% of the waters covered by the acts in New York.

We propose that both Section 404 and Section 403 be amended to allow existing state laws, regulations, and procedures to be accepted in lieu of federal law, if federal review determines that the state is capable of providing the resource protection envisioned by Congress. Provision should also be made to adequately fund those states to carry out this responsibility.

We, therefore, offer the following recommendations:

1. Amend Section 404(g)(1) as follows:

> "The Governor of any state <u>administering a permit program which the administrator determines has the capability of carrying out the objectives of this section</u>, or desiring to administer its own individual and general permit program under this section, for the discharge of dredged or fill material into the navigable waters (other than those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, or mean higher high water mark on the west coast, including wetlands adjacent thereto) within its jurisdiction may submit to the Administrator a full and complete description of the program it <u>administers</u> <u>or</u> proposes to establish

and administer under state law or under an interstate compact. In addition,..."

2. Repeal Sections 404(j) and 404(g).

3. Repeal Section 403 of the Rivers and Harbors Act, and add new Section 406 to the Clean Water Act as presented in Attachment #1.

Summary Closing

In closing, I would like to stress that a true federal/state/local partnership can only be realized if there is a strong legislative mandate for clean water, implemented by clear, concise regulations and an adequate resource base. We trust that the Congress will provide both of these in its upcoming deliberation on the fiscal year 1983 appropriations and amendments to the Clean Water Act.

I thank you for the opportunity to testify before your subcommittee today.

ATTACHMENT #1

Repeal Section 403 of the Rivers and Harbors Act of 1899 and add a new Section 406 to the Clean Water Act, as follows:

Section 406(a) - The creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States, is prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of any port, roadstead, haven, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same.

(b) - The Governor of any state administering a permit program which the Secretary of the Army determines has the capability of carrying out the objectives of this section, or desiring to administer its own program under this section for the navigable waters within its jurisdiction, may submit to the Secretary of the Army a full and complete description of the program it administers or proposes to establish and administer under state law or under interstate compact. In addition, such state shall submit a statement from the attorney general (or the attorney for those state agencies which have independent legal counsel), or from the chief legal officer in the case of an interstate agency, that the laws of such state, or the interstate compact, as the case may be, provide adequate authority to carry out the described program.

(c) - Not later than the tenth day after the date of the receipt of the program and statement submitted by any state under paragraph (b) of this subsection, the Secretary of the Army shall provide copies of such program and statement to the Administrator of the Environmental Protection Agency and Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service.

(d) - Not later than the ninetieth day after the date of the receipt by the Secretary of the Army of the program and statement submitted by any state, under paragraph (b) of this subsection, the Administrator of the Environmental Protection Agency and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, shall submit any comments with respect to such program and statement to the Secretary of the Army in writing.

(e)

(1) - Not later than the one-hundred and twentieth day after the date of the receipt by the Secretary of the Army of a program and statement submitted by any state under paragraph (b) of this subsection,

the Secretary of the Army shall determine, taking into account any comments submitted by the Administrator of the Environmental Protection Agency and the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, pursuant to subsection (d) of this section, whether such state has the following authority with respect to the issuance of permits pursuant to such program:

(A) To issue permits which:

(i) apply, and assure compliance with, any applicable requirements of this section;

(ii) are for fixed terms not exceeding five years; and

(iii) can be terminated or modified for cause including, but not limited to, the following:

(I) violation of any condition of the permit;

(II) obtaining a permit by misrepresentation, or failure to disclose fully all relevant facts.

(B) To issue permits which apply, and assure compliance with, all applicable requirements of this section, or to inspect, monitor, enter, and require reports.

(C) To assure that the public, and any other state the waters of which may be affected, receive notice of each application for a permit and to provide an opportunity for public hearing before a ruling on each such application.

(D) To assure that the Secretary of the Army receives notice of each application (including a copy thereof) for a permit.

(E) To assure that any state (other than the permitting state) whose waters may be affected by the issuance of a permit may submit written recommendation to the permitting state (and the Secretary of the Army) with respect to any permit application and, if any part of such written recommendations are not accepted by the permitting state, that the permitting state will notify such affected state (and the Secretary of the Army) in writing of its failure to so accept such recommendations together with its reasons for so doing.

(F) To assure that no permit will be issued if, in the judgment of the Secretary of the Army, after consultation with the Secretary of the department in which the Coast Guard is operating, anchorage and navigation of any of the navigable waters would be substantially impaired thereby.

(G) To abate violations of the permit or the permit program, including civil and criminal penalties and other ways and means of enforcement.

(H) To assure continued coordination with federal and federal/state water-related planning and review processes.

(2) - If, with respect to a state program submitted under subsection (b) of this section, the Secretary of the Army determines that such state:

(A) has the authority set forth in paragraph (b) of this subsection, the Secretary of the Army shall approve the program and so notify such state, and the Secretary of the Army shall suspend the issuance of permits under subsection (a) of this section for activities with respect to which a permit may be issued pursuant to such state program; or

(B) does not have the authority set forth in paragraph (b) of this subsection, the Secretary of the Army shall so notify such state, which notification shall also describe the revisions or modifications necessary so that such state may resubmit such program for a determination by the Secretary of the Army under this subsection.

(3) - If the Secretary of the Army fails to make a determination with respect to any program submitted by a state under subsection (b) of this section within one hundred and twenty days after the date of the receipt of such program, such program shall be deemed approved pursuant to paragraph (2)(A) of this subsection and the Secretary of the Army shall so notify such state who, upon subsequent notification from such state that it is administering such program, shall suspend the issuance of permits under subsection (a) of this section for activities with respect to which a permit may be issued by such state.

(4) - After the Secretary of the Army approves the program, he shall transfer any applications for permits pending for activities with respect to which a permit may be issued pursuant to such state program to such state for appropriate action.

(f) - Whenever the Secretary of the Army determines after public hearing that a state is not administering a program approved under section (e)(2)(A) of this section, the Secretary of the Army shall so notify that state and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days after the date of the receipt of such notification, the Secretary of the Army shall (1) withdraw approval of such program until the Secretary of the Army determines such corrective action has been taken, and (2) resume the program for the issuance of permits under this section for activities with respect to which the state was issuing permits and shall continue such authority until such time as the Secretary of the Army makes the determination described in clause (1) of this subsection and such state again has an approved program.

(g) - Each state which is administering a permit program pursuant to this section shall transmit to the Secretary of the Army a copy of each permit application received by such state and provide notice to the Secretary of the Army of every action related to the consideration of such permit application. Not later than the tenth day after the date of the receipt of

such permit application, the Secretary of the Army shall provide copies of such permit application to the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service.

If the Secretary of the Army intends to provide written comments to such state with respect to such permit application, he shall so notify such state not later than the thirtieth day after the date of the receipt of such application and provide such written comments to such state, after consideration of any comments made in writing with respect to such application by the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service, not later than the ninetieth day after the date of such receipt.

If such state is so notified by the Secretary of the Army, it shall not issue the proposed permit until after the receipt of such comments from the Secretary of the Army, or after such ninetieth day, whichever first occurs. Such state shall not issue such proposed permit after such ninetieth day if it has received such written comments in which the Secretary of the Army objects:

(A) to the issuance of such proposed permit and such proposed permit is one that has been submitted to the Secretary of the Army pursuant to section (e)(1)(E), or

(B) to the issuance of such proposed permit as being outside the requirements of this section, unless it modifies such proposed permit in accordance with such comments.

Whenever the Secretary of the Army objects to the issuance of a permit under the preceding sentence, such written objection shall contain a statement of the reasons for such objection and the conditions which such permit would include if it were issued by the Secretary of the Army. In any case, where the Secretary of the Army objects to the issuance of a permit, on request of the state, a public hearing shall be held by the Secretary of the Army on such objection. If the state does not resubmit such permit revised to meet such objection within thirty days after completion of the hearing, or if no hearing is requested within ninety days after the date of such objection, the Secretary of the Army may issue the permit.

(h) - The Secretary of the Army is authorized to waive the requirements of subsection (g) of this section at the time of the approval of a program pursuant to subsection (3)(2)(A) of this section.

EXECUTIVE SUMMARY

TESTIMONY OF
NEW YORK STATE COMMISSIONER OF ENVIRONMENTAL CONSERVATION
ROBERT F. FLACKE

BEFORE THE
UNITED STATES SENATE
COMMISSION ON ENVIRONMENT AND PUBLIC WORKS
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

July 29, 1982

Good afternoon Mr. Chairman and members of the Subcommittee. I am Daniel M. Barolo, Director of the Division of Water. On behalf of Robert F. Flacke, Commissioner of Environmental Conservation for the State of New York, I appreciate the opportunity to share with you New York's views relative to amendments to the Clean Water Act.

In our experience, the Act is basically sound and has led to significant improvements in the quality of New York's and the nation's waters. We are proud of our accomplishments, but recognize that adjustments to the Act are needed if we are to sustain the progress made to date relative to conventional pollutants and to address the more difficult toxic and hazardous substances problems before us.

We support, with some important exceptions, the Administration's proposed amendments now embodied in Senate Bill S.2652 and House Bill H.R.6670. Specifically, for the more important subject areas, we recommend:

1. Funding authorization - retain authorized level of $75,000,000 for Section 106 for the next five years and appropriate at least $51,200,000 for FY 83.

2. Deadlines for compliance - extend deadlines for BAT and municipal compliance to July 1, 1988, if EPA can promulgate national standards by July 1, 1984.

3. Pretreatment - retain a requirement that EPA promulgate national standards for critical industrial categories and/or pollutants.

4. NPDES permit time - extend life of NPDES permits from five to ten years.

5. Dams - exclude dams as point sources of pollution.

6. Dredge and fill - revise Section 404 of the Clean Water Act and Section 403 of the Rivers and Harbors Act to allow greater opportunity for state delegation and to eliminate program duplication.

My summary comments will focus on those amendments which we believe are most critical to enhancing the national framework for water quality

management while providing the flexibility the states need to administer their responsibilities.

1. Funding Authorization (Section 106)

State grants under Section 106 represent the primary source of federal funding for the administration of our water pollution control program responsibilities. Any reduction in real dollars to state programs at this time could have a significant impact on our ability to deliver basic programs. Reduction of our monitoring network, curtailment of our inspection and enforcement activities relative to major facilities, and the return of delegated programs such as NPDES are real possibilities within the next few years, given Administration proposals and state resource constraints.

It is totally inconsistent to promote, through new federalism, the enhancement of state authority and flexibility while simultaneously withdrawing an already inadequate federal support base. It is a further irony that Congress might reduce this support just as the issues become more complex. As we turn the corner on responding to the conventional pollutant problems, we're faced with the arduous task of adequately regulating the discharges of toxic/hazardous contaminants to our water bodies.

As there are timing and statutory problems with supplementing 106 funds with 205(g) and (j) allocations, we can't support EPA's contention that offsetting funds might be available.

Recommendation

Retain authorized level of $75,000,000 for Section 106 for the next five years. Appropriate a minimum of $51,200,000 for FY 83.

2. Deadlines for Compliance and Effluent Guideline Issuance (Sections 301, 304, 306, and 307)

EPA's failure to meet statutory deadlines for establishing effluent and compliance standards and guidelines has created significant problems for those states, like New York, with aggressive management programs. Our commitment to issue second round permits using "best professional judgment" places us in a potentially uncomfortable economic disadvantage to other states that may be waiting for EPA to set national limitations. More importantly, public health and the environment continue to be adversely affected, as water quality standards will not be attained or maintained in some important water bodies.

In that we recognize that there may be practical reasons for extending statutory compliance dates, we urge Congress to provide EPA with both resources and a clear mandate to ensure that standards and guidance will be promulgated in time to make compliance dates realistic.

Recommendation

Extend deadlines for BAT and municipal compliance to July 1, 1988 if EPA can promulgate national effluent standards by July 1, 1984.

3. Pretreatment (Section 307)

The discharge of inadequately treated industrial wastewater into municipal treatment systems interferes with treatment plant operations, passes pollutants through to receiving waters, and concentrates pollutants in sludges from the plant. Violations of municipal NPDES permit limitations result, sludge disposal becomes a problem, and public health and the environment are affected. Only pretreatment at the source will effectively remove certain pollutants from effluent discharged to sewage treatment plants. Without a national program framework, toxic and hazardous pollutants will continue to be discharged to our waters.

EPA must apply resources to promulgating national pretreatment standards for selected, critical industrial categories and/or pollutants. Without national standards, state and local governments have the onerous task of establishing meaningful limits for pollutants discharged to municipal systems. Leaving limit setting to local discretion is certain to aggravate the state to state inequities that already exist.

Recommendation

NYS opposes any language that would eliminate the requirement that EPA promulgate national standards for critical industrial categories and/or pollutants.

4. NPDES Permit Time Extension (Section 402)

Ten-year permits would give regulating agencies the ability to concentrate their resources on permit compliance rather than permit administration. Obvious advantages to the permitee are a reduction in paperwork and a more stable basis on which to make business decisions.

In New York, ninety percent of the point source pollution load comes from ten percent of the sources. Ten-year permits will allow us to concentrate our resources on the more significant discharges. We've always had, and should continue to have, the authority to revise permits prior to their expiration to update permit requirements or schedules.

Recommendation

Extend maximum duration of NPDES permits from five to no more than ten years.

5. Dams (Sections 502, 402, and 303)

Dams are not point sources of water pollution and therefore should not be subject to a NPDES permit.

Recommendation

Specifically exclude dams as point sources, as the Administration recommends.

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6. Dredge & Fill (Section 404)

We believe continuation of Section 404 is absolutely necessary from a national perspective. This regulatory tool provides the only protection for vital wetlands in some states. Federal regulation also ensures equity across the nation so that no one state is placed at an economic disadvantage because it requires reasonable environmental protection while others do not.

New York has an excellent set of environmental laws, including authority to protect tidal and freshwater wetlands. The Section 404 program could be streamlined considerably if delegation of responsibility to states like ours is made less burdensome. Section 404 allows for state assumption, but the rigid regulations governing delegation contain too many unacceptable provisions. These include (1) continuing federal review of draft state permits; (2) extensive notice requirements; and (3) mandatory time frames for federal review that conflict with state requirements. Furthermore, there is no provision for federal funding of a state program.

It is also important to note that there is no provision for state assumption of the Corps of Engineers' permit program in Section 403 of the Rivers and Harbors Act. The two federal acts are duplicative in this regard. If Section 403 responsibilities were retained by the Corps, duplicative permit processes would still apply to 75% of the waters covered by the acts in New York.

Recommendation

We propose both Section 404 and Section 403 be amended to allow existing state laws, regulations, and procedures to be accepted in lieu of federal law, if states can demonstrate that their programs provide the resource protection envisioned by Congress. Provision should also be made to adequately fund those states to carry out this responsibility. Specific language changes are proposed in the complete testimony.

Summary

NYS is proud of its commitment and accomplishments relative to water pollution control. Significant improvements in water quality have resulted from implementing the general provisions of the Clean Water Act. Its basic premises remain solid.

We, however, like most states, are at a significant crossroads. On one hand, we've developed the programs and expertise to deliver our water quality management responsibilities. Public awareness and expectation are great. On the other, we face growingly sophisticated issues with seriously restricted resources. In this situation, we can either accomplish the efficiencies and changes that are necessary to maintain our progress or revert to an ad hoc response to our water quality problems.

Congress now has the power to sustain the momentum that's necessary to take advantage of the investment we've all made to date.

We encourage you to make the adjustments to the Clean Water Act as discussed in our complete testimony so as to enhance state program flexibility while ensuring an adequate resource base to deliver our responsibilities.

Thank you for the opportunity to present this testimony.

AUTHORIZING RESEARCH INTO OCEAN DISPOSAL OF SEWAGE SLUDGE UNDER THE CLEAN WATER ACT

Statement for the Record
of the

Subcommittee on Environmental Pollution
Committee on Environment and Public Works
U.S. Senate
Washington, D.C.

July 27-29, 1982

by the
County Sanitation Districts of Orange County, California
P.O. Box 8127
Fountain Valley, CA 92708

Summary

Ocean disposal has been recommended as one option for sewage sludge management, contingent upon the sludge and local oceanographic conditions. Ocean disposal of sewage sludge from barges is permissible under the Marine Protection, Research and Sanctuaries Act, yet the Clean Water Act prohibits identical disposal operations from a shore-based pipeline. While a strong case can be made for reconciling this statutory conflict, the first step that Congress should take is to authorize the Administrator of EPA to grant a limited number of 5-year research permits to coastal publicly-owned treatment works (POTW's) for the purpose of determining under what circumstances, if any, pipeline disposal of sewage sludge can be allowed.

Over the past year, the County Sanitation Districts of Orange County, California (CSDOC) and the National Oceanic and Atmospheric Administration (NOAA), have jointly funded a research planning study by scientists from the California Institute of Technology (CalTech) and other major marine science institutions in Southern California. Joint municipal-federal research efforts, such as the CalTech study are an appropriate mechanism for focusing scientific effort on the major waste disposal problems facing many coastal

municipalities, and the shared funding arrangement gives the municipality a greater role than it has traditionally played. Under a research permit provision, CSDOC would construct a new ocean outfall to far greater depths than has ever been built before, and would support an intensive, 5-year research effort intended to predict and monitor the impacts of such an outfall on the marine environment. If the marine monitoring program revealed deleterious effects the ocean discharge would be terminated immediately. In any event, CSDOC, while constructing and studying the pipeline discharge, would continue its search for the best available land alternative for sludge disposal.

I. Introduction

One of the biggest byproducts of our nation's effort to clean up its waterways is sewage sludge. The major constitutent of sewage sludge generated by POTW's is naturally-occurring organic material; the principal pollution problem in inland waters arising from the biochemical oxygen demand of this organic material. Sludges also contain small amounts of synthetic organic compounds, heavy metals, and some petroleum-related hydrocarbons. These contaminants are often grouped together, for purposes of discussion (and legislation), under the heading of "toxics."

Recent estimates indicate total U.S. POTW sludge production on the order of 7 million metric tons per year.[1] The costs of sludge management by POTW's varies from a low of about $20 up to $500 per dry ton.[2] At $130/ton (EPA's "typical" figure) this amounts to over $900 million per year in operating costs nationwide; for many POTW's sludge management represents over one-half of their operating budgets. Despite this economic burden, an ever-increasing number of POTW's are finding the costs of sludge management to be of relatively minor concern compared to the logistical and public acceptance aspects of sludge disposal. Public concern for groundwater contamination, spurred by the discovery of hundreds of uncontrolled hazardous waste sites all over the country, is making it exceedingly difficult to obtain new sites for land disposal of sludge, or in many cases even to continue the use of existing sites.

In the early 1970's, public opinion drove national policy to restrict or ban all ocean disposal of sludge. Now we seem to be just as intent in our efforts to restrict or ban many forms of land disposal. In the 70's, EPA and the California Water Quality Control Board took the position that no sewage sludge could legally be disposed in the ocean, regardless of the human health or environmental consequences of the alternatives, and without regard to the quality of sludge

or the assimilative capacity of the ocean. Quite clearly these attitudes are emotional and instinctive rather than reasoned and scientifically based. Judge Abraham Sofaer struck down EPA's arbitrary ocean disposal ban under the Marine Protection, Research and Sanctuaries Act (MPRSA) in City of New York v. EPA, in August of last year.[3] The potential for ocean disposal (under the MPRSA) of sewage sludge off California was one factor in a recent court decision halting Construction Grant funding of land-based sludge disposal facilities in the Los Angeles-Orange County area.[4] Following this decision, another judge in the same district said that while ocean dumping "may be a legal possibility" under the MPRSA, it did not have to be considered "as long as there exists a practical land disposal method."[5]

In the past few years, prominent members of the marine science community, the National Oceanic and Atmospheric Administration (NOAA), the National Academy of Sciences (NAS), and the National Advisory Committee on Oceans and Atmosphere (NACOA) have expressed the belief that the coastal oceans have the capacity to safely receive and disperse some of man's wastes, including sewage sludge, without unacceptable ecological effects, that is the oceans have an "assimilative capacity." We submit that the majority of knowledgeable marine scientists would agree that the coastal oceans possess some finite capacity to accept wastes. The NACOA report, issued in 1981, underscores this weight of scientific opinion in its

strongly-worded recommendation:[6]

> NACOA recommends that ocean disposal of sewage sludge either by barge or through properly designed outfalls should continue to be a disposal option under appropriate management conditions and with adequate monitoring safeguards in those areas where no unreasonable degradation of the environment results from sludge disposal.

CSDOC believes there are several options for ocean disposal of sewage sludge off the Southern California coast. We contend that coastal POTW's are obliged to consider ocean disposal among the other options for sludge management, and the purpose of submitting this statement to Congress is to support our request that the Clean Water Act be amended to allow necessary research on the various ocean disposal options to proceed.

II. The Southern California Experience

From Point Conception to the Mexican border, a distance of about 250 miles, by far the largest anthropogenic (man-derived) input to the coastal Pacific Ocean is POTW effluent. In one sense, this makes the Southern California coastal marine environment an excellent laboratory. In 1979 the five major POTW's in Southern California discharged more than one billion gallons of treated wastewater per day to the Pacific Ocean.[7]

In 1969 the five major POTW's in Southern California agreed to fund an ongoing series of environmental studies, designed to measure the effects of ocean disposal of sewage effluent and solids. That agreement produced the Southern California Coastal Water Research Project (SCCWRP), which since 1973 has been headed by oceanographer Willard Bascom. SCCWRP's budget has been augmented over the years with federal and state research grants. To ensure the objectivity of SCCWRP's reports, control of the project was turned over to a commission of local civic leaders and elected officials, all of whom are concerned with environmental quality. The scientific work carried out at SCCWRP is reviewed separately by an independent consulting board of prominent marine scientists. SCCWRP's work, and the other research that has been performed in this region, prompted the former EPA Assistant Administrator for Water, Thomas Jorling, to comment:[8]

> . . . [Southern California] is atypical for two reasons. First, it has been the subject of more research . . . than all the others around this country combined, multiplied by several hundred . . . The second . . . is that going into a California waste treatment system is like going into a nuclear submarine; while other waste treatment facilities are more akin to the ironclad Monitor. . . . Willard Bascom should feel proud of his work and so should all the communities that have been involved.

Willard Bascom published a paper three months ago in the peer-reviewed journal Environmental Science and Technology, which briefly summarizes the decade of work carried out at SCWRP, and we have attached a copy of the full paper as an Appendix. We respectfully request that the Bascom paper be printed as part of the record. We will highlight briefly the major conclusions reached by marine scientists in their studies of our 250-mile coastal "laboratory."

HEAVY METALS. Substantial quantities of heavy metals are found in sewage, and about 90% is associated with the particulate (solid) phase. About 10 to 12% of the metals remain in the vicinity of the discharge; the rest is carried away by the current. Of the fraction which remains, it is so tightly bound to solid particles that it is practically unavailable to marine organisms.[9] Sewage-related metals are not found in fish muscle tissue (the part eaten by humans), although there may be elevated levels of metals in marine invertebrates near outfalls. There are some indications that high metal levels in invertebrates, in enclosed bay or estuarine systems, may reach levels that pose potential harm to humans, but this is not the case in the open coastal waters of Southern California.[10]

SYNTHETIC ORGANICS. A major industrial facility discharged DDT into the Los Angeles County sewerage system for years, and that DDT is thought to have been responsible for

decimating the brown pelicans on the Channel Islands by adversely affecting their eggshells. Since the DDT discharge was stopped in 1970, the amount of DDT reaching the Southern California Bight through POTW discharges has been reduced to 3.5% of its 1971 value, and the pelicans have returned to what are believed to be normal numbers. Other persistent synthetic organic compounds of environmental concern nationwide, polychlorinated biphenyls (PCB's), have dropped to 13.6% of their 1971 value even though there was no single source to eliminate, as in the case of DDT.[11] Concern in Southern California is focussed on the long-term impacts of the existing deposits of DDT on the Palos Verdes shelf, rather than on current discharges. As far as both DDT and PCB's are concerned, at least in the open coastal waters of California, marine organisms that take up these compounds appear to be well-equipped to isolate the contaminants within the organism in such a way as to prevent actual harm to the organism itself.

The five Southern California coastal POTW's are facing dramatic increases in sludge production as they put more secondary treatment facilities on-line. The three largest agencies, along with the U.S. EPA and the State of California, initiated an area-wide sludge management study in 1976, called the Los Angeles/Orange County Metropolitan Area Sludge Management Program (or "LA/OMA Project"). The original objective of the LA/OMA Project was to evaluate all <u>land-based</u>

options for sludge management, including landfilling, composting, solar drying (in desert areas), and thermal destruction. Because, at that time, EPA policy was that ocean disposal of sludge was illegal under both the Marine MPRSA and the Clean Water Act, EPA would not allow federal dollars to be spent examining ocean options. The State of California took the same position as EPA on the ocean options.

As the LA/OMA Project got underway, one of the most attractive land disposal options, from both an environmental and an economic perspective, appeared to be the "solar drying basin" option. In this scenario, sludge would be pumped, in its normal 3-to-5% slurry, over the mountains into desert valleys. Land would have been purchased, and the sludge would have been spread on the land to dry in the sun. After the moisture content reached an acceptable level, the dried sludge would have been mixed with non-productive soil to produce agricultural land. Unfortunately, by the time the LA/OMA Project reached the public hearing stage, the people who lived in those desert counties adopted the now-common "not-in-my-back-yard" syndrome, and county after county began passing "no sludge" ordinances.

The solar drying basin option was not the only one to bite the dust as the LA/OMA Project went through its paces, winding down in 1980. In the final LA/OMA report, it became

apparent that the only land-based options available to the three POTW sponsors would be those that could be implemented on land already owned by the agencies. By 1980, public opposition to any new sludge facility siting became unusually intense in all of our service areas. Since the City of Los Angeles and Los Angeles County Sanitation Districts had land available on which to construct at least some kind of facility, the LA/OMA Project was able to develop useful recommendations for them. However, CSDOC was only using 20 acres of space at a county-operated landfill on private property. Therefore, we had to begin searching for a new site on which to build a composting facility, which appears to be our best land-based option according to the LA/OMA report.

The final LA/OMA Report, adopted by both the U.S. EPA and the State of California as a final Environmental Impact Satement, was not able to make a recommendation for Orange County. We did not then, and we do not now, have an acceptable land site for composting. During a series of public meetings on the subject, the third (and last) meeting brought out over 600 people -- not one of whom favored our choice for a site. As a result of public pressure, our own County Board of Supervisors went on record in opposition to our plans to site a composting facility near their proposed new County landfill -- a siting decision made necessary because of the need to bury the composted sludge in a landfill. CSDOC is still in the

process of trying to complete its portion of the LA/OMA Study -- but we are now looking at less satisfactory methods that could be implemented on land we already own, such as co-combustion with municipal solid waste, mechanical composting, and incineration.

III. The Ocean Options

Because of federal and state unwillingness to consider ocean disposal of sludge, the three POTW sponsors of LA/OMA contributed to a $75,000 to a study of ocean options that was made a part of the final LA/OMA report. All the sponsors recognized that the ocean option study was clearly inadequate as the basis for a final recommendation, but in light of the apparent mindset against ocean disposal it would have been imprudent at the time to commit a larger amount of local public resources to this end.

There are two basic ocean disposal options: ocean "dumping" from a vessel under the MPRSA, and ocean "discharge" from a pipeline under the Clean Water Act. The former is currently allowed, following the New York City v. U.S. EPA decision while the latter was expressly forbidden by this Congress last December in Public Law No. 97-117, overturning the D.C. Court of Appeals' decision in NRDC v. EPA, 656 F.2d 768 (1981).

The emphasis of our limited analysis of ocean disposal options off Southern California was on finding improved ocean discharge methods based upon experience gained from the Hyperion (City of Los Angeles) sludge outfall in Santa Monica Bay. In their application for a §301(h) waiver for their effluent outfall, the City acknowledges that the sludge outfall, as currently operated, would probably not be able to meet the statutory criteria of §301(h). From conversations with City officials, we understand that they have examined at least five potential modifications, either to the discharge or to the sludge itself, that would reduce or eliminate the environmental impacts of the sludge outfall. Los Angeles is, however, a party to a consent order with EPA and the State, and is progressing towards full implementation of land-based sludge disposal by mid-1985.

Regardless of whether sludge is barge-disposed or piped offshore, one important feature of our submarine coastal topography is the presence of very deep water just offshore. Although we know very little about the deep submarine basins (1,500 to 2,000 feet deep), scientists believe that biological activity in the deep basins is only a tiny fraction of what it is on the continental shelf -- where all of the existing six discharges are located. Therefore, two research efforts were undertaken with the POTWs' $75,000 contribution to LA/OMA: (1) a survey of biological conditions in two of the deep basins was

prepared by SCCWRP,[12] and (2) the Environmental Quality Lab at California Institute of Technology (CalTech) did some preliminary mathematical modelling to predict the fate of sewage sludge if it were to be placed into the deep ocean basins.[13]

The CalTech analysis concluded that the two best options for deep ocean disposal are: (1) sludge outfalls with discharge depths of about 1,000 feet (compared to the 300 foot depth of the Hyperion sludge outfall), and (2) barge disposal in deep water using a submerged pumped discharge between 150 and 300 feet below the surface (to keep the material discharged below the thermocline), but still several hundreds of feet above the ocean floor, with either a fixed discharge location or a "roving" location. No reputable marine scientist, or sewerage agency for that matter, can say with certainty that deep ocean outfalls are the ultimate solution to our sludge problems. As we mentioned above, the scientific data base for the deep basins, even though they are less then ten miles offshore, is sparse indeed. One remarkable feature of the basins is that they are very low in oxygen -- in fact the 260 square mile Santa Barbara Basin, the northernmost of 14 offshore basins, is essentially devoid of oxygen and has been so for thousands of years.[14] The LA/OMA "mini-study" of deep ocean alternatives has only provided us with a hint of what might be one of the safest, least environmentally degrading,

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options for sewage sludge disposal. We cannot now close our eyes, or our minds, to the deep ocean options, but the work should be completed.

IV. The Orange County Research Program

CSDOC has yet to find a site to complete the EIS process started eight years ago with the LA/OMA Project. We currently landfill about 65 dry tons of sludge per day, and as more secondary treatment goes on-line and our service population grows, we expect this amount to increase to around 150 dry tons per day by the year 2000. Because public pressure appears to have taken away our opportunity for the "optimum" choices for land disposal, we deem it essential to make a thorough analysis of our ocean options. Clearly an ocean disposal operation is possible -- and legal, by barge -- and we are actively considering that option. However, to be able to put sewage sludge at a particular spot in the ocean by barge (at a high operating cost, we might add) but not to be able to put exactly the same sludge in the same spot via pipeline, is an anomalous situation at best. Thus, CSDOC has also been exploring the pipeline option.

In partnership with NOAA (which contributed two-thirds), CSDOC sponsored a second phase of the CalTech study, at a total cost of about $85,000, to define the research and monitoring that would be needed if a deep ocean sludge

outfall were to be built off Southern California. The resulting research/monitoring plan will be finished this fall. We have also contracted with SCCWRP to obtain biological, physical, and chemical baseline data that will be absolutely necessary before any deep ocean sludge disposal option could be implemented. SCCWRP's field investigations began last year, at a cost of $165,000 per year (borne solely by CSDOC).

At this point we cannot say with precision just how deep an outfall would be built, if one were to be allowed by law, but we can reach the 1000-foot depth contour about 7-1/2 miles off our present facility. The pipeline would be relatively small, 21 to 24 inches in diameter. We estimate the cost, in 1982 dollars, of such a pipeline at between $15 and $20 million. CSDOC is prepared to bear the entire cost of building the pipeline, plus any associated sludge conditioning facility that would have to be built onshore. We are treating this effort as a research project, with a potential savings to our rate-payers if it turns out to be a viable option. If the monitoring program shows deep ocean disposal to be environmentally unsatisfactory, all of the members of our Joint Board (consisting of 40 of the top elected officials in our service area of 1.8 million people), recognize that the pipeline would have to be shut down, and on-site land disposal alternatives implemented.

V. Relationship to Other Municipalities

A word about the relationship of our proposal to the situations of other POTW's is in order, particularly those in Southern California. A legitimate question is why this research could not be undertaken at the City of Los Angeles' existing sludge outfall. First, the Hyperion sludge outfall was built on the continental shelf, in the mid-1950's, in about 300 feet of water, for what appeared to be a good reason at the time. SCCWRP's studies show that the buoyant plume from the outfall does not reach the surface, and most of the organic matter rises into the "photic" zone, the shallower waters where primary productivity takes place. This allows the organic matter to be beneficially utilized as food by marine organisms, thus producing large numbers of fish and other organisms. SCCWRP reported that the four largest discharges support about 20,000 metric tons of extra benthic "standing stock."[15] This is readily acknowledged and demonstrated by the party-boat fishermen, who frequent the pipeline "reefs" for the demonstrably greater catches that are made there.

The information gathered by SCCWRP and other scientists at the Hyperion outfall over the last decade and more is the basis on which we are suggesting that a move to deeper waters could produced improved results. City of Los

Angeles scientists themselves have proposed several modifications to the Hyperion sludge outfall, including the deep ocean proposal among others, as ways to reduce the outfall's adverse environmental effects.

Other geographic regions that would be expected to benefit from deep-ocean outfall research conducted by CSDOC include most of the island POTW's, e.g., Hawaii and the western Pacific islands, Puerto Rico and the Virgin Islands. Also included in this list would be several Alaskan communities, and a number of cities in southeast Florida, where the Gulf Stream and deep water are only a stone's throw offshore.

One benefit that could accrue from the kind of research we are proposing is the purely economic one that would flow to inland cities, and coastal cities where ocean disposal is not possible. If one or two, or more, coastal cities could eventually turn to ocean disposal of all or some of their sludge, there will be that much less demand for scarce federal dollars under the Title II Construction Grants program. Our colleagues in inland states would be as pleased as we if ocean disposal by pipeline is ultimately demonstrated to be an acceptable option.

VI. Legislative Action Necessary

We have cited the statements of the National Academy of Sciences and the National Advisory Committee on Oceans and Atmosphere in their call for a balanced, multimedia approach to

waste disposal. Members of this Committee, particularly the eight members of the full Committee who also serve on Merchant Marine and Fisheries, are only too well aware of the arguments that were raised in 1977, and then again earlier this year, to ban absolutely ocean disposal of sewage sludge. You are also well aware of the overwhelming scientific evidence, and the logic, that says an absolute ban on sludge disposal in <u>any</u> medium cannot be justified on either human health or environmental grounds.

Last year, the D.C. Court of Appeals said that sludge discharges could be authorized under §301(h) of the Clean Water Act. In December, your conferees agreed to a Senate proposal to reverse this decision legislatively. We do not believe it makes any difference what is discharged under §301(h), as long as the stringent criteria enacted in 1977 are met. We at Orange County Sanitation Districts are grateful that the language included in the Conference Report last December allowed our joint research project with NOAA (the CalTech "phase two" effort) to continue. The Conference Report included a commitment by both houses of Congress to examine marine disposal of sewage sludge again this year, and we hope this statement will be helpful in that regard.

We strongly believe that the ocean option must be kept open -- for in some instances it might be the best option. We are pleased to see that it remains open under the MPRSA, and we

urge the Committee to recommend amending the Clean Water Act to allow research into ocean disposal of sludge. We do not seek a reversal of Pub. L. No. 97-117's ban on sludge disposal under §301(h), but request that language be adopted allowing 5- year research permits under §405 of the Act. Since so little is known about deep ocean disposal, the §301(h) criteria are inappropriate for research permits. The more general "ocean discharge" criteria in §403(c) should apply to such permits. We think that the §403(c) criteria are more relevant to the problem at hand, one reason being that they are practically identical to the ocean disposal criteria under §102 of the MPRSA.

We look forward to working with the Subcommittee and its staff in developing language that would allow well-planned research efforts such as CSDOC's to continue so that the nation can have the benefit of data and analyses of ocean disposal of sludge based on sound technical and scientific procedures. A matter of this significance should be considered on the basis of rigorous scientific inquiry, not emotionalism..

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LAKE WALLENPAUPACK

RECEIVED

c/o Pike County Planning Commission 106 Broad Street, Milford, PA 18337
Telephone 717-296-8060

August 6, 1982

The Honorable John Chafee, Chairman
Subcommittee of the Environment and Public Works Committee
Environmental Pollution
Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

Enclosed is a resolution concerning the Environmental Protection Agency Clean Lakes Program. Please distribute copies to the other members of your committee.

Sincerely,

Gerald Ehrhardt

Gerald Ehrhardt
Chairman

Enclosure
GE:cek

COMMISSIONER'S OFFICE
PIKE COUNTY

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MILFORD, PA.
WILLIS J. GILPIN
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MILFORD, PA.
COMMISSIONERS

CENTA T. QUINN, CLERK
JOHN F. FINAN, COUNTY SOLICITOR

MILFORD, PA. 18337

EPA CLEAN LAKES PROGRAM

WHEREAS, The Lake Wallenpaupack Watershed Management District is a grassroots effort to protect the water quality of Lake Wallenpaupack, Pike and Wayne Counties' single most important economic resource; and

WHEREAS, The U.S. Environmental Protection Agency has given their support by funding (70% federal, 30% local) a Phase I Diagnostic Study of the 212 square mile watershed as authorized by Section 314 of P.L. 92-500, the Clean Lakes Program; and

WHEREAS, The Pike County Board of Commissioners has participated in good faith in funding the local share, anticipating EPA participation in the 50%-50% funding of the Phase II Implementation program; and

WHEREAS, Clean water clearly transcends local concerns and is the key resource for continued prosperity of the entire Nation:

NOW THEREFORE, BE IT RESOLVED that the Pike County Board of Commissioners supports the continued funding of Section 314 of P.L. 92-500, The Clean Lake Program, Phase I and Phase II Projects.

Warner M. Depuy, Chairman

H. James Crellin

Willis J. Gilpin

August 5, 1982
Date

Testimony of Dr. Chu-Fa Tsai, Professor of Fishery Biology, University of Maryland, for the Environmental Pollution Subcommittee of the Senate Committee on the Environment and Public Works

It is my great pleasure to be here to testify to this subcommittee on the effects of toxic chemicals on fish and fisheries. Before I go into the subject, I would like to introduce myself. I am Dr. Chu-fa Tsai, Professor of Fishery Biology at the Chesapeake Biological Laboratory of the University of Maryland, Solomons, Maryland. I joined the faculty of the University in 1965. My field of speciality is Water Pollution Biology. My research interest is the study of the effects of environmental modifications, particularly discharges of domestic and industrial wastes, on fish life.

Effects of toxic chemicals on fish can be divided into two major categories; lethal effects and sublethal effects. The former is also called acute effects and the latter chronic effects. Fish kills are the best example of a lethal effect. Fish kills occur when the concentration of a toxic chemical in water is so high and fish are exposed to it so quickly that they are trapped and die of toxication. Every year millions of fish are killed in this country as the result of the discharges of domestic and industrial wastes which contain toxic chemicals.

In the laboratory, lethal effects of many chemicals on many species of fish have been intensively studied. For example, 0.7 mg/l copper kills bluegill sunfish in 98 hours, while 0.1 mg/l kills both brown trout and striped bass in the same exposure period. Fry and larvae are usually more sensitive to toxic chemicals than adult fish. Different chemicals affect different target organs. For example, heavy metals such as copper, zinc and lead damage gills or coagulate the mucus on the gills. This prevents the uptake of oxygen, causing death by suffocation. Barium impairs involuntary muscles. Cyanide affects the respiratory enzymes. Chlorinated hydrocarbons, phenol and mercury affect the nervous system.

Although a fish kill may be a spectacular phenomenon, it occurs usually accidentally and is not a common phenomenon. In the areas below the domestic and industrial waste discharge outfalls, fish simply avoid swimming into the area contaminated with toxic chemicals. In other words, the area becomes unsuitable for fish life and thus, fish populations are depleted or even eliminated. Fish depletion for many miles of a river below an outfall is very common in this country.

Next I would like to discuss the sublethal effect. It occurs when the concentration of a toxic chemical in water is too low to kill fish but strong enough to affect fish physiologically. Common sublethal effects are inhibition of sexual and reproductive maturation, inhibition of hatching success, production of structural deformity in larvae, reduction of swimming performance, reduction of food intake, increased susceptibility to pathogenic bacteria, and increased cancer incidences in fish populations. Because the concentrations that cause such sublethal effects may be as low as one-tenth or even one-hundredth of a lethal concentration, they occur much more often and widely than the lethal effects in nature. Therefore, sublethal impacts of toxic chemicals on fish are considered to be a more serious problem than the lethal effects I just mentioned.

For example, copper as low as 0.08 mg/l retards the growth and sexual development and prevents spawning of the fathead minnow. This means that the fish living in such water become sterile. Cadmium at the concentration of 0.08 mg/l or higher causes morphological deformity in the bluegill sunfish larvae and retards their growth. Such deformed larvae rarely survive beyond the larval stage. Hydrogen sulfide as low as 0.01 mg/l decreases swimming performance of the bluegill sunfish. Reduction in the swimming performance decreases their ability to catch prey and to escape from predators. Eventually the fish die of starvation or predation. Salmon exposed to PCB or heavy metals (copper and zinc)

decrease their immune response and become more susceptible to pathogenic bacteria. In nature, fin rot disease is found to be common in the polluted areas of New York Sound and Baltimore Harbor which are known to be contaminated with toxic chemicals from industrial sources. Also, many organic toxicants are carcinogenic. They cause tumors and cancers in fish. Skin cancers (papillomas) have been found to be common in the bottom-dwelling fish, such as flat fish, catfish and eel, in the areas contaminated with toxic chemicals.

Besides the above sublethal effects which depress fish stocks and affect fisheries, the contamination of toxic chemicals in food fish is another concern for fisheries and human health. It is a well known fact that fish, oysters, and mussels have a strong capacity to absorb and accumulate toxic chemicals several hundred times greater than those in the surrounding water. As a result, concentrations may reach beyond the permissible limit for human consumption. For example, mercury concentration in some species of freshwater fish in Lake St. Clair and Lake Erie, which are polluted with industrial wastes, were found to be 10-15 mg/l. These amounts are ten to twenty times higher than 0.5 mg/l permissible limit for human consumption. Occurrence of mercury poisonings in inhabitants of Minamata in Japan in the past is another good example of this.

When oysters are exposed for five months to 0.01 mg/l cadmium, which is only slightly higher than natural concentration of 0.001 mg/l in marine water, they accumulate 18 mg/kg of cadmium in their body, a concentration which exceeds 13 to 15 mg/kg of the human emetic threshold. Because of the tendency for strong bioaccumulation of toxic chemicals by food fishes, a slight increase in such chemicals in natural water can easily lead to accumulations in food fishes to levels unsuitable for human consumption. This greatly damages the fisheries.

I have briefly described the lethal effects, sublethal effects, and bio-

accumulation of toxic chemicals in fish. For millions of years in fish evolution, fish have lived in clean water and thus, they adapt only to clean water. They have encountered toxic chemicals in water only in the last few decades. It is too short a time for fish to become modified physiologically and genetically to be adapted to waters which are contaminated with toxic chemicals. Therefore, it is evident that fish need clean water for their survival. For the same reason, both sport and commercial fishermen need clean water for their survival too.

At this point I would like to conclude my testimony. Thank you. Now, I am very happy to answer your questions.

A STATEMENT ON BEHALF OF THE UNITED STATES BREWERS ASSOCIATION, INC.

ON AMENDMENTS TO THE CLEAN WATER ACT

July 1982

The United States Brewers Association, Inc. (USBA) appreciates this opportunity to present its views with regard to amendments to the Clean Water Act.

At the outset, we wish to emphasize that USBA fully supports the goals of the Act, and believes that only minor adjustments are necessary to facilitate the attainment of these objectives. Briefly, we offer for your consideration our views on the following issues: (1) citizen suits; (2) NPDES permit period; (3) extension of deadline for compliance with BCT/BAT limitations; (4) de minimus discharge exemptions; (5) best professional judgment (BPJ) factors for NPDES; and (6) pretreatment.

I. CITIZEN SUITS

A. Recommendation: Section 505(e) preserves the enforcement rights and remedies necessary to carry out the federal water pollution control program, and need not be amended to recognize federal common law actions.

B. Discussion: Congress, with its passage of the Federal Water Pollution Control Act Amendments of 1972, clearly established a "comprehensive long-range policy for the elimination of water pollution." S. Rep. No. 92-414 at 95. Indeed, every point source discharge is prohibited unless covered by a permit. As recently recognized by the Supreme Court in the City of Milwaukee v. Illinois and Michigan, 451 U.S. 304 (1981), this all-encompassing legislation preempts the applicability of the federal common law.

There are those who advocate, however, that Congress should amend the Act to recognize federal common law nuisance actions. The addition of this enforcement tool to the statutory remedies provided under the Act, they assert, will

assist citizens in helping Congress attain its goal of eliminating water pollution.

The USBA contends that such an amendment may very well have the opposite effect, and open the flood gates to greater confusion in the environmental field where uniformity, clarity and certainty are needed in order to protect the objectives which the Act seeks to achieve. To fully appreciate the impact such an amendment would have, one must understand the meaning and effect of the federal common law and the significance of the Milwaukee decision.

Common law, a legal system developed by our English ancestors centuries ago, is based upon judicial decisions and provides standards of conduct and remedies for wrongs. Over the years, the legal community has looked to these judicially created laws to fill a legislative void, i.e., the legislature has not established a standard or a remedy for a particular act or omission. In the United States, the development and application of the common law has primarily been confined to the states. The U.S. Supreme Court has held that federal courts, unlike state courts, are not general common law courts and do not possess a general power to develop and apply their own rules of decision. Erie R. Co. v. Tompkins, 304 U.S. 64, 78 (1938). In recent years, however, the restraints of Erie have steadily weakened as federal courts have become increasingly inclined to exercise authority beyond the interpretation of federal statutes. This increase in the power of the federal judiciary has concerned legal scholars who see this metamorphosis as a distinct threat to the Constitutional doctrine of separation of powers. Clearly, our system of government is based on the principle that federal authority should be exercised through statutes enacted by Congress, interpreted by the federal courts and administered by federal agencies.

In Milwaukee, the Court simply recognized that the authority exerted by the federal judiciary exceeded these Constitutional parameters. Where Congress has specifically and comprehensively spoken by statute, and regulation issued pursuant to that statute, on a subject so as to occupy the field, federal courts

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will not be permitted to establish their own standards and remedies on the same subject on the basis of federal common law.

Clearly, Congress intended the Act to be its comprehensive statement on water pollution. Effluent standards and enforcement and compliance mechanisms were fully established. In enacting the Act, Congress intended to set the minimum federal level of effluent discharges. To this end, EPA was tapped with the responsibility for promulgating and enforcing uniform standards. To permit federal common law nuisance actions would be to blur the division of functions between the Congress and the federal judiciary. Surely, Congress intended its legislative standards, not judicially imposed standards, to be the effluent limitations required to be met by dischargers. Yet, if Congress amended the Act to recognize federal common law actions, it would not only be tantamount to a transfer of Congress' legislative functions to the federal judiciary, it would expose dischargers to arbitrary standards that could vary with each federal district court. In short, the planned, cohesive, studied and consistent approach to cleaning up our nation's waters would, for all practical purposes, be replaced with an ad hoc response to a series of individual problems. This could result in a situation where a discharger is in compliance with his permit but must cease his discharging activities (and possibly close his business) because his activities have been determined, pursuant to a federal common law action taken against him, to be or create a public nuisance.

Under the Act, EPA is vested with an array of compliance and enforcement options which are designed to address any water pollution control problem that may arise. Foremost among these are sections 309, 311, 504 and 505. To add an enforcement capability that is foreign to the Congressionally-enacted water pollution control program can only serve to impede compliance with the Act's standards and reduce the effectiveness of the legislation.

Further, it should be noted that while common law actions under the Act are

not available to federal courts, they are to state courts. Moreover, the Act is clear that any state, or political subdivision thereof, may promulgate and enforce effluent standards that are more stringent than that required by the Act. §510. Thus, while the federal government is necessarily bound by a sense of national uniformity in setting standards, the Act provides the flexibility needed by the states and their citizens to meet their unique pollution problems.

At a time when significant strides have been made in reducing the amount of pollutants discharged into our nation's lakes and rivers, it would not be in Congress' interest to abandon a successful program in favor of the application of often vague and indeterminate nuisance concepts and maxims of equity jurisprudence which characterize the federal common law.

II. NPDES PERMIT PERIOD

A. Recommendation: Section 402 should be amended to extend the NPDES permit term from five to ten years.

B. Discussion: Section 402(b)(1)(B) presently provides that NPDES permits may be issued for a fixed term not to exceed five years. This five-year limitation is insufficient to provide certainty for planning and unnecessarily burdens the regulatory process. Given the fact that it often takes one year or more for a final permit to be issued, that a renewal application must be filed at least six months prior to the expiration of the permit, and that a discharger may require as much as three years to install treatment technology, the five-year limit leaves insufficient time to test the effectiveness of the treatment before the permit renewal application begins again. As most business decisions commit a company's resources for periods of much longer than five years, a longer permit period would allow more certainty, thereby making investments in pollution control more economical.

For the federal and state agencies assigned the responsibility for issuing NPDES permits, the five-year permit period creates an administrative burden which

causes unnecessary expenditures of time and money by industry and government, especially when the permit expires where no significant changes have occurred since its issuance. Extending the life of the permit to ten years would obviously reduce the administrative processing time and thereby insure that large backlogs do not accumulate in the future.

Extending the life of an NPDES permit to ten years would not run counter to achieving the Act's goal of eliminating water pollution. EPA would retain the authority to reopen a permit proceeding and revise or revoke the permit for just cause. Moreover, such an extension would have no impact on EPA's emergency powers under section 504 to address unique situations that pose a threat to the environment.

In addition to increasing the term of an NPDES permit, consideration should also be given to simplifying the permit procedures where no significant changes have occurred since the permit was first issued.

III. EXTENSION OF DEADLINE FOR COMPLIANCE WITH BCT/BAT LIMITATIONS

A. Recommendation: Amend section 301 to extend the current deadline for industrial compliance with BAT and BCT effluent guidelines from July 1, 1984 to July 1, 1987, or three years after promulgation of such guidelines.

B. Discussion: Under present law, section 301 requires compliance by July 1, 1984 with BAT effluent limitations for toxic pollutants and with BCT effluent limitations for conventional pollutants. Failure of industrial dischargers to have these technological controls installed by this date will constitute a violation of the law. These dates are unreasonable in light of EPA's failure to promulgate effluent limitations guidelines for many industry categories and its inability to issue case-by-case permits to 69,000 dischargers.

EPA was to have established final effluent guidelines defining BAT and BCT for industry categories by July 1, 1980. No guidelines for any industry category were promulgated by this deadline. Indeed, it was not until January, 1981

that EPA promulgated its first guideline. If EPA maintains its present schedule, the agency will promulgate its last guideline in final form no earlier than June, 1984. Such slow progress prompted the House Oversight Subcommittee (House Public Works and Transportation Committee, Committee Print 96-71 at p. 29) to observe that problems confronting the agency "call into grave question whether the EPA is truly capable of putting into effect a genuinely workable, legally defensible and cost-effective regulatory scheme with which industry and local government can reasonably be expected to comply within the statutory guidelines."

Assuming EPA can complete its formidable task of promulgating final effluent limitations guidelines by 1984, industry will obviously require a reasonable lead time within which to construct the necessary treatment facilities to come into compliance with the applicable guidelines. At a minimum, compliance with BAT and BCT limitations should be extended to July 1, 1987. This date coincides with the current BAT deadline for nonconventional pollutants. However, if EPA is unable to meet its announced schedule of promulgating all final guidelines by 1984, compliance deadlines should be established three years after the promulgation of the pertinent effluent guidelines. Finally, additional flexibility should be built into the Act to extend the BAT and BCT compliance date on a case-by-case basis if a discharger can show that, despite its good faith efforts, compliance with the limitations by the prescribed date is not feasible.

IV. DE MINIMUS DISCHARGE EXEMPTIONS

A. Recommendation: Sections 402 and 502(12) should be amended to exempt de minimus discharges of pollutants.

B. Discussion: The Act presently requires that a NPDES permit be obtained for a point source discharge even if the discharge is small or contains only minute quantities of benign pollutants. In short, any source discharging water

must have a permit. This requirement is significantly more stringent than that found in other environmental statutes such as the Clean Air Act which contains provisions regulating source emissions only if such emissions are in excess of a threshold level.

The NPDES permit program imposes time-consuming requirements on both industry and the permitting agency. Implementing regulations are complex and can require considerable effort and expense. In many cases, the discharge is of little or no consequence to improved water quality but a permit is nevertheless required. For example, a permit is required for uncontaminated stormwater runoff channeled into ditches around an industrial plant. Such insignificant source permitting unfortunately is far more the norm rather than the exception.

The Clean Water Act should be amended so as to direct the efforts of government and industry toward cleaning up significant pollution of the nation's waters, without unnecessary time, money, and attention aimed at permits for insignificant discharges. While EPA has independently taken a positive step in this direction by setting priorities for permit renewal, its discretion remains severely limited by the Act. If discharges are de minimus, based on concentration, volume and type of discharge, and are insignificant to the protection of water quality, EPA should be given flexibility under the Act to exempt sources or categories of sources from NPDES permit requirements.

V. BEST PROFESSIONAL JUDGMENT (BPJ) FACTORS FOR NPDES

A. Recommendation: Section 304 should be amended to specify the factors which must be taken into account when applying BPJ. These factors should be identical to the factors used in establishing BAT and BCT effluent limitations guidelines. Once BPJ guidelines are developed, EPA should be required to publish them.

B. Discussion: As noted in a separate section of this position paper, EPA has to date published very few effluent limitations guidelines for BAT or BCT.

Until such guidelines are promulgated, NPDES permits will be issued to dischargers on the basis of BPJ. Unfortunately, unlike BAT and BCT, factors used for developing BPJ guidelines were never written into the Act. Rather, EPA has published guidance documents which have the force and effect of regulations, but which have not undergone vigorous analysis. The result is that BPJ is being applied in an inconsistent and arbitrary manner.

To resolve this problem, EPA should be required to specify the factors which must be taken into account when developing BPJ guidelines. For consistency purposes, these factors should be identical to those used in establishing BAT and BCT limitations, and are as follows:

1. Age of equipment and facilities.
2. The treatment process employed.
3. The engineering aspects of the application and various types of control technologies.
4. Any process changes.
5. The cost of achieving effluent reduction.
6. Non-water quality environmental impacts, such as energy requirements as set forth in section 304(b)(2).

Once BPJ guidelines are developed, they should be published by EPA.

VI. PRETREATMENT

A. Recommendation:

1. Congress should expressly prohibit EPA from requiring pretreatment of industrial effluent to remove pollutants which are compatible with local POTW treatment procedures.

2. Instead, NPDES permits should require POTW's to develop and enforce their own pretreatment programs.

3. Congress should amend §307(b) of the Act to provide for POTW development of pretreatment programs, with EPA guidance, that prevent the

interference by incompatible wastes with POTW treatment of municipal and compatible waste and the resultant "pass through" of toxic pollutants.

B. Discussion: Pretreatment of industrial effluent is often necessary because certain industrial pollutants may interfere with normal treatment operations of a POTW and/or may pass through the treatment works thereby reducing the quality of receiving waters.

The 1977 Amendments to the Clean Water Act required EPA to promulgate regulations imposing general and categorical standards for pretreatment. Section 307(b) of the Act authorized EPA to grant "removal credits" to an industrial user for those pollutants removed by the POTW. The purpose of the credit system is to avoid the expense of redundant treatment. Unfortunately, EPA has developed such a complex and cumbersome pretreatment program that it is nearly impossible to obtain such removal credits.

When Congress enacted §307 in 1972, it did not intend to require the pretreatment of compatible wastes. The House/Senate Conference Report on the 1972 Act states:

> Pretreatment of biological waste that is compatible with the treatment provided by a publicly-owned waste treatment plant into which such waste is introduced may not be necessary. Examples of such biological waste may be the normal effluent of a brewery and of food processing plants where the composition and proportion of such effluent is compatible with the municipal waste treatment system. In no event is it intended that pretreatment facilities be required for compatible wastes as a substitute for adequate municipal waste treatment works. [Emphasis added]

Yet in promulgating its general pretreatment regulations under §307(b), EPA requires pretreatment of compatible wastes. These wastes include those whose level of biochemical oxygen demand, suspended solids, pH, and fecal coliform bacteria is compatible with the treatment provided by a POTW. Compatible wastes also include those which have chemical oxygen demand, total organic carbon, phosphorus (and phosphorus compounds), nitrogen (and nitrogen compounds), fats, oils

and greases of animal or vegetable origin, if the POTW is designed to treat such pollutants.

EPA has ignored, without justification, the clear intent of Congress that such compatible wastes were not to be subject to pretreatment for whatever purpose. Several arguments support this Congressional intent that underscores the negative effects resulting from an incorrect EPA interpretation. For instance, efficiencies result from combining compatible industrial wastes with domestic wastes. Industrial wastes during conventional secondary treatment can absorb the excessive nitrogen and phosphorus characteristic of domestic sewage. In contrast, separate nitrogen and phosphorus treatment units for municipalities are capital and energy intensive. Thus, it is environmentally sound to operate a single large treatment works, rather than a number of small units, to promote aesthetics, efficient land use and sludge disposal. Separate and multiple treatment works contribute more to inflation, needless energy consumption, and the potential for upset than a large municipal facility.

The USBA contends that pretreatment would be better regulated on the local level than on the national level. POTWs vary in their ability to treat industrial wastes, and pretreatment requirements should be tailored to the capacity of the individual POTWs. This is not a task which can be accomplished efficiently through complex national regulations administered from Washington. Instead, EPA should be required to allow each POTW to tailor local industrial pretreatment to the treatment capacity of that POTW. EPA could ensure that a POTW requires sufficient pretreatment to prevent interference or pass through through the existing system of NPDES permits. This local tailoring of pretreatment would also eliminate EPA's unnecessary and inefficient requirement that wastes be pretreated even though they are compatible with a particular POTW's treatment procedures.

The United States Brewers Association (USBA) is a non-profit trade association

of malt beverage producers and suppliers to the brewing industry, whose brewer members account for over two-thirds of total U.S. malt beverage production. USBA's member companies employ almost 32,000 persons directly, and over 500,000 people in the United States are involved in beer production and distribution and other related industries. Overall, malt beverage production in the U.S. is a $10.345 billion industry. The American brewing industry contributed a record $2.7 billion in local, state and federal excise taxes in 1981.

WWEMA

Water & Wastewater Equipment
Manufacturers Association, Inc.
P.O. Box 17402
Dulles International Airport
Washington, D.C. 20041
(703) 661-8011

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STATEMENT BEFORE THE

SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

BY THE

WATER AND WASTEWATER EQUIPMENT

MANUFACTURERS ASSOCIATION, INC.

August 2, 1982

Introduction

Mr. Chairman and members of this subcommittee, the Water and Wastewater Equipment Manufacturers Association, Inc. (hereinafter, WWEMA) is very pleased to have the opportunity to offer its views about the state of America's clean water program. We recognize and appreciate the role of your subcommittee and its excellent staff in shaping the important water pollution control policies of this country.

WWEMA is an association of over 150 corporations that develop technology, manufacture and supply equipment, materials and services in the water and wastewater industry. Our plants in nearly every state of the union employ over 25,000 persons who, for the most part, have made their career to solve wastewater treatment problems. The accumulative revenues of the member corporations account for about 20% of expenditures under the construction grants program and an equal amount for industrial water pollution control.

At the outset of this statement, we wish to emphasize that our organization carries a very positive attitude about the accomplishments of the clean water program and in contrast to what the subcommittee may have heard from other sources, we remain optimistic about the opportunities that lie ahead. Our optimism is based on the fact that this period of oversight and review provides us, as manufacturers and the nation at large, of the opportunity to make the necessary adjustments and corrections in the clean water program so that we can finish the enormous task of assuring our population a continuing source of clean water. This is not to say that we are unaware of the complexities and ambiguities of problems that have plagued the national effort to improve water quality. WWEMA is pleased, therefore, to be able to share the following views and comments with you.

Legislative Goals

Mr. Chairman, your committee played a critical role in the successful passage of P.L. 97-117 and WWEMA fully appreciates both the effort and dedication of your committee. The signing of the construction grants reform bill marked a rededication of federal funding under Title II more toward environmental goals than a public works oriented program which tends to promote construction without regard to environmental results. The Clean Water Act in this reauthorization, however, does not require modifications anywhere near the magnitude of the construction grants amendments of 1981. Most of the problems still associated with today's clean water program

result from the way in which the act has been implemented, not from the act itself. WWEMA believes the Clean Water Act including its overall goal to restore and maintain...the integrity of the nation's waters is fundamentally sound and does not require structural changes. It has been our experience in the past that any modification has resulted in a slowdown or backsliding of the entire program. The clean water program cannot afford further slowdowns and extensions of time if the industry is to maintain the quality, quantity, and technical expertise that presently exist.

However, if the Congress feels compelled to make minor adjustments to the act, then WWEMA suggests no change to the technology-based effluent standards and continued tight control of discharges containing toxic pollutants from either municipal/industrial sources. Technology should remain paramount to any water quality based control approach that might be advocated by some during this reauthorization. We further urge the Congress to view the tight control of toxic pollutants as an utmost urgent environmental goal. While we support technology-based effluent standards, we also recognize that legislation cannot be tailored to a narrow base to cover all site-specific environmental conditions. Therefore, any variations requested of this type are a regulatory matter requiring no legislative input.

EPA Recommendations

In May 1982, the EPA sent to Congress a series of 15 recommendations to amend the Clean Water Act. We are pleased to know that the EPA amendments leave untouched sections that mandate water quality sufficient to protect fish, wildlife and recreation (fishable/swimmable and BAT effluent standards) and maintains the requirement of general pretreatment standards. We urge the Congress to require those who seek major changes to the act to carry a heavy burden of proof justifying any such changes.

Extension of BAT Compliance Deadlines

The Clean Water Act requires industries to reduce their discharge of pollutants to water bodies by installing progressively more controls complying with the more stringent BAT requirements. In our opinion, the current BAT compliance date of July 1, 1984 cannot be met since the EPA is yet to issue BAT effluent limitation standards for direct discharges from 34 major industries involving 129 chemical or other toxic substances which require regulation under the act. This same tight compliance scheduling is present in the municipal construction grants program. However, in the 1981 Clean Water Act Amendments, the POTW secondary treatment compliance schedule was extended to 1988 for those POTW's experiencing reduction in financial assistance under the

act or where changed conditions go beyond the control of the owner affecting the current compliance date. WWEMA agrees that the current BAT compliance schedule cannot provide for orderly industrial implementation by the 1984 deadline. We believe that an extension is warranted to a date certain between 1986-1988 as set by Congress.

It has been proposed to extend the deadline for issuance of regulations covering BAT effluent limitation guidelines to July 1984 including the national categorical pretreatment effluent limitation guidelines. WWEMA believes that the July 1, 1983 deadline should be maintained for major industrial categories such as organic chemical, pesticides, petroleum refining, etc. Maintaining the current compliance date for these industries would create an optimum impact on pollution and paralleling the water quality impact priority policy established by Congress in P.L. 97-117 emphasizing projects that address water quality management considerations to achieve optimum water quality consistent with public health and water quality goals. We suggest the EPA be allowed to segment the issuance of these regulations with the major categories by July 1, 1983 and the balance by July 1, 1984.

Pretreatment

The pretreatment program has been called a regulatory thicket with heavy federal involvement which tends to induce a level of absolutist values with inevitable tendency toward excessive rigidity. We believe recent EPA recommendations to amend the Clean Water Act adjusts the pretreatment focus to some extent allowing flexibility of control from technology-based standards. This includes the allowance of environmental exceptions from both the general and categorical requirements of a POTW that certifies it has an adequate program to insure that its discharge does not interfere with the attainment and maintenance of the designated stream uses and their NPDES permit. Therefore, flexibility at the local level is necessary. WWEMA supports these environmental exceptions for a certified POTW facility as it removes the EPA from the interface of state/local government and industry.

Other Issues

NPDES Permit Life: The above EPA recommendations provide for a ten year NPDES permit life compared to the present five year. WWEMA believes that granting of said extension should be based on a demonstrated need by the permit holder. While we agree the extension of the permit term will reduce the annual permitting workload and provide more certainty for a long period making

investments in pollution control more economical, the granting of such extension should not be a common or routine practice without a demonstration of need. A ten year permit covers a long time which, as we have observed from the past, can include a multitude of national trend changes in financial, social and environmental priorities.

Federal Facility Exemptions: The EPA recommends an amendment granting a federal facility exemption from the requirements of Section 306 and 307 of the act. This expands the scope of the President's authority to exempt all federal facilities and property from the requirements of the act if said exemption would be in the "paramount interest of the United States." WWEMA believes this across-the-board exemption is an inequitable punishment for those municipalities and industries who must comply with the EPA regulations. An exemption vacating federal pollution control efforts on a given stream could negate any upstream or downstream treatment efforts of others and waste the resources of those required to continue compliance.

Civil Penalties: The proposed amendment to Section 309 provides the administrator with authority to administratively assess civil penalties upto $10,000 per day. WWEMA supports this amendment provided civil penalties are enforced equitably between municipal as well as industrial violators of the Clean Water Act.

Conclusion

All in all, WWEMA remains optimistic about the future of this national enterprise to protect our water resources. We remain confident that the people of this country want clean water and that with adjustments to the way the business is done, clean water goals can be achieved at a reasonable cost and in an attractive business environment. It is not an impossible dream. If the will is there, the technology is here. We feel confident that your committee will again provide sufficient oversight to make only the necessary adjustments and corrections to the act maintaining consistent scope and continued momentum toward achieving its environmental goals.

* * * *

STATEMENT

of the

WATER QUALITY ASSOCIATION

to the

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

in re

AMENDMENTS TO THE CLEAN WATER ACT

(S.2590 and S.2652)

July 20, 1982

The Water Quality Association appreciates this opportunity to present views on the Clean Water Act, in connection with these hearings on its reauthorization.

Our Association, a nonprofit organization headquartered at 477 East Butterfield Road in the Chicago suburb of Lombard, Illinois, consists of some fourteen hundred members who have voluntarily agreed to join together for the purpose of serving their common interests in areas such as water quality improvement technology promotion, information exchange facilitation, educational and community affairs programs' conduct, publication of materials relating to water's quality, and other traditional trade association functions which are intended to benefit the public through Industry betterment.

The members of this Industry which comprise the Association's constituency are engaged in the business of improving the quality of water used in homes, in institutions, in commercial establishments,

and in all varieties of manufacturing and other industrial occupations. Through the technologies, products, and processes of point of use treatment, water, whether it is needed as working water, or as drinking water, or simply as water usually wasted, is treated to that content quality required for the specific use needed, in the amount actually desired, and at the point utilized. This treatment service is provided by this Industry anywhere from a single faucet to a small community, and throughout the entire range in between.

The Industry itself consists of more than two hundred manufacturers, about five thousand retailers and wholesalers and distributors, and does nearly a billion dollars in annual sales. It employs over fifty thousand of our fellow American men and women, and it serves an excess of six million families and more than a quarter million commercial/industrial/institutional customers. This Industry has the potential for materially assisting governments in assuring water's safety through the attainment of goals and the satisfaction of standards.

Our interest in the Clean Water Act emanates from a dual concern: as a business community representative group whose activities are affected by the Law's provisions, and as individual members of the general community.

During the thirty-plus years preceding enactment of this Statute, beginning with the first comprehensive water quality legislation in 1948 (Public Law 80-845), Congressional experience with legislative and administrative environmental activities demonstrated the existence

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of serious defects in efforts to control and abate water pollution. This experience strongly suggested the need for planning and implementation on a broad scale, coupled with coordination at both federal and state levels. And when the emphasis on environmental purity - some might even say idealism - reached its zenith during the decade of the 1970's, the present water pollution control program, Public Law 92-500, became law.

Ten years have now elapsed since passage of the Federal Water Pollution Control Act. There can be no doubt concerning its beneficial effects. Truly significant improvement has taken place in the quality of the Nation's waters, in the protection of the public's health, and in the aesthetics of the country's environment. Not the least vocal of those who recognize the progress thus made is the Federal Government itself.

In February, 1982 testimony before Congress, for example, the Deputy Administrator of the Environmental Protection Agency said that: "In the past decade the application of technology-based controls on industrial discharges, coupled with the construction grants program for control of municipal sewage, has resulted in substantial reductions in the amounts of pollutants that otherwise would have entered the Nation's waters....By the time the 1977 amendments were enacted, it was clear that the first phase of secondary and best treatment requirements were resulting in greater reductions in conventional pollutants than had been expected."

The ten years since 1972 have, in addition to the changes in the condition of America's environment, also witnessed other far-reaching changes: changes in technology, changes in the quality and customs of

life in the United States, changes in the public's attitude toward government and, indeed, government's attitude toward itself, and changes in the willingness of taxpayers to support programs without questions about programs' validity and usefulness. It is eminently appropriate, therefore, that the objectives and the administration of Public Law 92-500 are being re-examined at this time, and that such re-examination is being conducted in the context of the totality of current national priorities.

No one would seriously suggest that genuine effort to control and abate water pollution be discontinued. At the same time, however, many do question the validity of simply re-enacting the 1972 goals and timetables, particularly in the light of results already accomplished and in the light of contemporary conditions. The best expression of this re-examination need is contained in the aforementioned EPA testimony: "The Agency faces difficult questions about how much additional pollutant control is necessary and at what cost...we want to avoid treatment for treatment's sake."

Many also question and criticize the Law's administered rigidity. The Water Quality Association is among the growing number of those who believe that the time has come to improve the Act by making it more responsive to its ten-year life experience. This experience demonstrated clearly that the Law's rigidity deprives regulators of the ability to adapt rules to the variety of real life circumstances which exist locally and with which the regulators must deal on a day-to-day basis. A prime example is the uniform standard and control technology prescrption which fails to take into account vastly different local effluent qualities and capacities.

Still others question whether there has in fact not been a pursuit of ecological idealism which has resulted in exclusion of consideration for other national goals which are of equal or even greater importance. In other words, shouldn't we, in the evaluation of environmental activities, attempt also to achieve the proper balance between objectives relating to energy production, local community economic stability, federal budget impacts, increased deficit demands, employment, taxation, international trade, etc., etc.? It seems to us that no single one of these considerations, including environmental purity, is properly assessed in a vacuum.

Each affects the other in some meaningful way. And there is thus presented to the Congress a compelling case of national policies' conflict which, after ten years of this Act's implementation and administration, must be confronted and reconciled.

The necessary re-examination, therefore, transcends a mere statutory "tune-up." The issues are genuine, fundamental, and far-reaching. Is zero-discharge still a practical, or even desirable, objective? Are municipalities capable of actually achieving compliance with standards? Does the technology-forcing mechanism still constitute a realistic approach? Can the present economy support the expenses involved in achieving the last few remaining percentage points of cleanup? Is that necessary anyway? Are the discharge standards set at levels which presume that all receiving waters are uniformly identical in quality? Are some of these standards so unrealistic as to insist on higher quality discharge than may be found in natural waters? Are point sources being pressured

while non-point sources are being disregarded? Shouldn't states be given more discretion? Has the regulatory agency overburdened itself with deadlines, permit schedules, and inflexibility? Has improved scientific information and changed data interpretation affected goals' integrity?

And there are other questions, not the least of which relate to the public's attitude toward continued support for expensive environmental programs, especially in the context of progress already achieved. In this respect, Executive Order 12291 of February 17, 1981, employed in the implementation of broadly-stated statutory objectives, simply makes good sense.

It simply makes good sense for regulation to be conditioned on the use of flexibility, cost-benefit justification, and reasonableness. Regulatory decisions, to be most productive of legislative objectives, and most acceptable to both those regulated and those sought to be protected, ought to be based on adequate information concerning the need for and consequences of proposed action.

Regulation, to be effective, should be undertaken only when there has been a convincing demonstration that potential benefits to society outweigh potential costs; should seek to maximize societal benefits; should explore and genuinely examine the existence and utility of all available alternative approaches to any given regulatory goal; should favor adoption of the approach producing the least net cost to society; and should take into account other national conditions, goals, and effects.

The authorizing legislation, in our judgment, should reflect such instructions to those thereby charged with responsibility for executing the will of the people acting through the Congress.

* * * * *

CLEAN WATER ACT AMENDMENTS OF 1982

THURSDAY, JULY 29, 1982

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, D.C.

The subcommittee met, at 10 a.m., in room 4200, Dirksen Senate Office Building, Hon. John H. Chafee (chairman of the subcommittee) presiding.

Present: Senators Stafford, Chafee, Symms, Gorton, Murkowski, Bentsen, and McClure.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good morning. Today is the final day of hearings regarding the amendments to the Clean Water Act. Primarily, we will focus on two issues today: Amendments to section 404 of the act, and consideration of the amendments that would overturn a U.S. district court case decision which requires EPA to require dams as point sources of pollution.

We are very pleased that our first witness this morning is the distinguished senior Senator from Texas, Senator John Tower, who, of course, as we all know, is chairman of the Armed Services Committee. As I understand it, Senator Tower, you and Senator Bentsen have introduced an amendment to section 404, and you will be addressing that amendment this morning, or your general views on the act.

I would want the record to show that Senator Armstrong wished to appear with you this morning, but scheduling conflicts prevented his attendance. His statement will appear in the record of the hearing.

[Senator Armstrong's statement follows:]

STATEMENT OF HON. WILLIAM L. ARMSTRONG, U.S. SENATOR FROM THE STATE OF COLORADO

Mr. Chairman, I appreciate the opportunity to appear today before this Committee and discuss Senator Tower's bill, S. 777.

I support S. 777 very strongly, and have been a cosponsor of this measure since it was introduced early in this Congress. I do so because it seems plain to me that the federal government, in the form of the Army Corps of Engineers, should not be in the local land use planning business.

It was the intention of Congress for the Corps to regulate dredge and fill operations in America's waterways. What is "navigable" has of course been the subject of much controversy and litigation. A series of federal court decisions so broadened this term that now any stream with an average annual flow of 5 cubic feet per

second comes under Corps jurisdiction, along with its adjacent wetlands. These are brooks and creeks, Mr. Chairman, not America's harbors and water highways.

As a result, the Corps of Engineers is making intrusive and coercive land use decisions high in Colorado's Rocky Mountains, hundreds of miles away from the nearest waterway that a reasonable observer would think of as navigable. The long-term goal of Section 404 of the Clean Water Act, to ensure the water quality of America's fragile network of truly navigable waterways, is being slowly subordinated to the senseless short-term harassment of individual private landowners. This redtape regime typifies excessive government at its worst, and also frustrates the important purpose of the Clean Water Act by focusing scarce enforcement resources on an often insignificant water quality issue and building public cynicism about this country's clean water objective.

I've been concerned about these abuses for some time and supported Senator Tower in 1977, when he led the effort to reform the Section 404 program by limiting the Corps' jurisdiction over waters that are neither navigable nor critical to navigation. Last year, however, this regulatory absurdity reached a new high when the Corps announced that practically all of the private ground of Gunnison County in western Colorado was a wetland and that a permit would be required before any landowner could do such ordinary things as excavate a foundation for a new house or otherwise develop his land in a non-agricultural way. Neither bogs, swamps, deltas, estuaries nor marshes were involved in the Gunnison County case, Mr. Chairman; instead, what brought the regulatory zeal of the Corps down upon the heads of landowners in Gunnison County was . . . irrigated hay meadows. Although agricultural activities are generally exempted from Section 404 regulation, treatment of these hay meadows as "wetlands" has seriously impaired the developability of these agricultural lands and could drastically interfere with the growth of the Town of Gunnison.

This pointless federal intrusion had precious little to do with water pollution control. It has been repeated, though in less extreme instances, all across the high country of Colorado where the ground is typically frozen half of the year and technically a "wetland" the other half. Indeed, the problem has become so severe in our state that the Colorado State Senate unanimously approved a resolution calling in Congress to pass legislation like S. 777. I would like to submit a copy of this resolution for the Record, because it demonstrates very effectively the intensity of frustration being felt by state and local governments around the country.

But Colorado is not the only state that has been unnecessarily burdened by this excessive regulation. Too many landowners in this country are all too familiar with the extremely time-consuming bureaucratic process that can take months or even years before a Section 404 permit is secured under the Clean Water Act. As this Committee is aware, the Presidential Task Force on Regulatory Relief has launched an effort to reform this duplicative and very burdensome regulatory process. In my judgement, the Section 404 permit system is an excellent place to implement reforms aimed at curtailing the abuses of over-zealous federal regulators, and I support the efforts of the Reagan Administration to improve this program. However, I think it is right for Congress to reassert its intention that this regulatory regime applies to only truly navigable waters.

S. 777 us designed to restore some common sense to the Clean Water Act by restricting application of the Section 404 permit to waterways that have been or are being, used for interstate or international commerce. This definition, borrowed from the Rivers and Harbors Act of 1899, has been proven to be practical and has been very precisely defined in over 80 years of court cases. It will put an immediate end to the unnecessary and unproductive harassment of private landowners, while allowing the Corps of Engineers to target its water pollution enforcement efforts on America's major waterways. State and local governments are the proven experts in areas of land use regulation, and this bill restores to them the primary responsibility for wetland protection. It also allows any state to opt for remaining under the current regime; any advocate of states' rights should be in favor of allowing the states to have this choice, quite apart from the other compelling reasons for supporting this bill.

For all these reasons, Mr. Chairman, I urge the Committee to consider S. 777 expeditiously and favorably, and I thank you for the opportunity to be heard on this issue.

SENATE MEMORIAL NO. 1—MEMORIALIZING THE U.S. CONGRESS TO SUPPORT AMENDMENTS TO THE CLEAN WATER ACT OF 1977

Whereas the United States Army Corps of Engineers is charged with administering the "dredge and fill" program on the navigable waters of the United States pursuant to section 404 of the federal Clean Water Act of 1977; and

Whereas the federal regulations promulgated pursuant to the act provide for regulation of wetlands in direct contravention of clearly expressed congressional intent; and

Whereas the Corps' administration of the wetlands program in the state of Colorado has been carried out in such a manner as to constitute an abuse of the Corps' discretionary authority; and

Whereas the Corps' officials charged with administering the wetlands program have been arbitrary and capricious in their targeting of specific counties for the enforcement of permit requirements under section 404; and

Whereas the Corps' has been reluctant to cooperate with county and local governments in administering the program and has imposed unnecessary and unexplained delays in the issuance of permits; and

Whereas The Corps has been inconsistent in its designations of wetlands and has denied directly affected private landowners and citizens of the state an opportunity to participate in the mapping designations made by the Corps; and

Whereas such mapping of private land constitutes a land use planning decision and as such is an invasion of an area of governmental decision-making traditionally and appropriately reserved for local governments; and

Whereas the Corps has faild to recognize and to exempt from the permit requirements of the program certain statutorily exempt activities; and

Whereas this oppressive regulatory activity threatens the state of Colorado's management of its water resources, adversely affects the agricultural, construction, and housing industries in the state and erodes the rights of property owners in Colorado; now: Therefore, be it

Resolved by the Senate of the Fifty-third General Assembly of the State of Colorado:

That the Congress of the United States is hereby memorialized to:

(1) Redefine navigable waters for purposes of the Clean Water Act of 1977 to include only those waters used or susceptible of being used in their natural condition as a means to transport interstate or foreign commerce;

(2) Eliminate the jurisdiction of the Corps of Engineers over artificial wetlands created as a result of present or past irrigation of the land;

(3) Restrict the expansion of federal government authority over nonnavigable waters: Be it further

Resolved, That copies of this Memorial be transmitted to the President of the Senate and the Speaker of the House of Representatives of the Congress of the United States and to each member of the Colorado Congressional delegation.

Senator CHAFEE. Additionally, I would like to place in the record a statement expressing concern for wetlands protection from some group of scientists, some 1,200 of them. It is an important statement, and I will attempt to have copies made for the balance of the other members of the committee. (See p. 1012.)

Senator Tower, we are delighted you are here this morning, and we look forward to your testimony. I ask that you now please proceed.

STATEMENT OF HON. JOHN TOWER, U.S. SENATOR FROM THE STATE OF TEXAS

Senator TOWER. Thank you very much, Mr. Chairman. I appreciate the opportunity to appear today. I want to commend you as being one chairman to start a committee meeting on time.

Senator CHAFEE. Also, I would like to commend you as being one Senator who arrives on time.

Senator TOWER. There is a lot to be said for that Yankee efficiency as you all up there know that.

Senator CHAFEE. Thank you.

Senator TOWER. Mr. Chairman, the problem we are here to discuss is not new. For almost 10 years the definition of navigable waters as defined in the Federal Water Pollution Control Act [FWPCA] and interpreted by the courts has plagued numerous segments of our society, as they strive to use their land to earn a living. Farmers, ranchers, timberers, miners, and others have found that what they thought were their legitimate plans for the use of their land were subject to the dredge and fill permit process as outlined in section 404 of FWPCA. I doubt that many of my colleagues have not heard from constituents the tales of permit applications taking 4 years to find their way through the regulatory maze.

The reason for this problem is simple. The FWPCA only once defined navigable waters in section 502 as the waters of the United States. This vague definition, when interpreted in court, resulted in the broadest imaginable interpretation being given to navigable waters.

Suddenly so-called prairie potholes, playa lakes, streams that were only full for a short time each year, and other incongruous bodies of water fell under the regulatory domain of the Corps of Engineers, the Environmental Protection Agency, the Department of the Interior, the Department of Commerce. Jurisdictional problems arose between the agencies over the processing of permits, and farmers who had certain kinds of migrating fowl land on their prairie potholes once a year found that the water in that pothole had become, for all intents and purposes, sacrosanct.

What have we done to alleviate this regulatory nightmare? We have tried to patch and amend the definition of navigable waters to make it fit everybody's purpose. Wetlands, which each of us knows are a valuable part of the ecosystem, were coupled with the Hudson Bay and the mighty Mississippi, all under the heading of navigable waters.

The Corps of Engineers has tried to put together a system that will be, simultaneously, sensitive to the problems of the likes of the snail darter, while assuring that oil tankers can make their way up the Houston Ship Channel, and that a farmer can build a stream diversion that will allow him to farm almost a third of his property that would otherwise be wiped out by floods. The definition is too broad. It is no wonder that the corps has been unable to efficiently carry out this task.

I firmly believe that the ultimate solution to the problem must be a legislative redefinition. To that end, in 1976 and 1977 I sponsored legislation that would have alleviated this problem by narrowing the definition of navigable waters. Both times these bills failed by narrow margins. Again in this Congress, I have introduced a bill, S. 777, that would restrict the definition of navigable waters to those that are truly navigable.

This simple change will bring the system of policing navigable waters back into bounds and will allow the actually navigable areas to be better policed by the Corps of Engineers.

Some of my colleagues contend that the current changes in the section 404 regulatory system being made by the corps will sufficiently alleviate the problems. I applaud the work that the corps has done during the past 2 years, and I feel that many of the

changes they will institute cannot help but cut some of the time and frustration out of the permitting process. Yet, no matter how well-crafted, these regulatory changes cannot affect the designation of areas that currently fall under the definition of navigable waters, which must still be permitted for dredge and fill activities. I submit that only the Congress has the capability to redefine these areas.

I foresee that no matter how finely tuned the regulatory process becomes, problems will continue to plague each of us, as elected representatives, until we narrow the definition of navigable waters to encompass those that are truly navigable and which this act was originally intended to protect.

Again, Mr. Chairman, my thanks for allowing me to and these two witnesses testify before this subcommittee today. They have been kind enough to come here and testify today: Dr. I. M. Rice, who is the executive vice president of the Trinity Improvement Association, testifying on behalf of the Texas Water Conservation Association. This is a statewide organization dedicated to the task of serving, developing, protecting, and utilizing the water resources of Texas.

Also, Dr. James O. Jones, the manager of the Coastal Resources Department, Espey, Huston & Associates, an environmental consulting firm. Mr. Jones has worked for quite a number of years on section 404 permitting process problems and is a regulatory specialist. I would like to thank these witnesses for appearing. I appreciate the committee giving them the opportunity to appear.

Senator CHAFEE. Thank you very much, Senator Tower.

We appreciate your coming and your thoughtful presentation. We will certainly give that a great deal of consideration, plus we are looking forward to hearing from your two witnesses.

Senator Bentsen is here, and Senator, if you have a statement, we would be delighted to hear it.

OPENING STATEMENT OF HON. LLOYD BENTSEN, U.S. SENATOR FROM THE STATE OF TEXAS

Senator BENTSEN. Thank you very much, Mr. Chairman.

I would like to state that I certainly endorse Senator Tower's bill, and I am pleased to be a cosponsor of it. We have been involved in this for quite some time. We have never quite won it. One of these days we are going to.

I am pleased to join in it with you. It is really designed to revise what has become one of the very first examples of bureaucratic redtape and a misinterpretation, I think, of the congressional intent. In 1976 and 1977, Congress failed to make the necessary changes in the section 404 programs which would clearly distinguish between those that represent field permit requirements that are in the national interest and those that represent Federal encroachment on the everyday lives of this Nation's citizens.

Under the current law, a Federal permit could be required by virtually every farmer and rancher who wants to do any material altering of his land; every city who wants to lay a waterline; every county who wants to construct a drainage ditch. In 1977, Congress attempted to respond to problems with the section 404 program

that were resulting in unreasonable time delays of permits, Federal control of traditional State responsibilities and Federal infringements on the water rights of private landowners by a definition of navigable waters that had been broadened to extend to all waters of the United States.

We were informed during floor amendments to the section 404 program that the modifications which have now become law would dispel widespread fears that the program is regulating activities that were not intended to be regulated. I regret to say that just isn't the case.

In 1977, it took the average section 404 permit applications 129 days to be reviewed. Proponents of the law argued that the time limits were set to accomplish it in 90 days. What has happened? Permit delays are worse today than they were 5 years ago, with the permit process averaging between 120 and 300 days. Budget cuts have helped add to that problem. In 1977, we were told that the current law provided for States to take permitting responsibility for the so-called phase 2 and phase 3 waters and that this delegation to the States would reduce Federal involvement.

I said at the time that as "EPA, the corps, and the Fish and Wildlife Service each retain an effective veto over any State proposal, I fail to see how we can realistically claim much in the way of progress. I sincerely question whether many States will accept delegation of section 404 powers under such conditions." A recent check on the status of this situation shows that those fears I expressed then have become a reality. To date, not a single State has been delegated full section 404 responsibility, not one.

In 1977, we were told that the problems of Federal encroachment on the rights of private landowners would be resolved by specific activities exemptions and delegation of the phase 2 and phase 3 water regulatory authority, to the States. But the approach never really faces the key question: What is the Federal jurisdiction in regulating dredge and fill activities that makes every landowner with 5 acres of water subject to the maze of Federal regulation and the powers of the Federal Government whenever he wants to alter the use of that water on his land?

A vivid example of this situation involves some small bodies of water which exist in the West often created by rainfall. In my part of the West, they call them playa lakes. There are some 10,000 of these lakes. Most of them have no discharge; most of them, totally, within the confines of one piece of property.

Senator TOWER. If the Senator would yield at that point, there may be more than 10,000 of them after that recent rain we have had out there.

Senator BENTSEN. I'm not sure how long they will last.

Senator TOWER. But they won't last long.

Senator BENTSEN. That is the only part of the country I know of where you can be standing knee deep in floodwaters and have dust flying in your face.

Under current EPA guidelines, these lakes are subject to the section 404 process. That really far exceeds the concept of dredge and fill permitting that Congress intended. Yet under the sweeping and uncontrolled authority of the existing law, it may well be allowed.

I really applaud the recent initiative of major reforms in the corps' permitting program under the guidance of the Presidential Task Force on Regulatory Relief. I think that is a good step forward, but I don't think it is enough. The fundamental problem of the section 404 program will still exist: The definition of water resources which should be subject to Federal jurisdiction and regulation. The need for Congress to enact provisions to modify section 404 is still with us.

Mr. Chairman, I really appreciate the fact that you are holding these hearings and am pleased to have the senior Senator from Texas testifying before us.

Senator CHAFEE. Thank you very much, Senator Bentsen.

We have four people on the panel coming up, three are Texans, so I suppose that is about fair, three out of four, that is about a fair proportion in any contest.

We look forward to hearing them and appreciate your coming, Senator Tower.

Senator TOWER. Thank you, Mr. Chairman.

I would like to endorse everything that my colleague from Texas said. Senator Bentsen has stated it far more comprehensibly than I have, and, I would say, has pretty well illuminated the problem.

I also want to acknowledge the continuing efforts that he has put forward in this and the leadership he has shown, but we really do need some relief, Mr. Chairman. I hope the committee will look favorably on what we have proposed.

Senator CHAFEE. I don't know your schedule, Senator Tower. If you have to leave at this point, we would excuse you.

Senator TOWER. I will have to excuse myself, Mr. Chairman, but I would like to submit for the record, understanding that the time for the hearing of witnesses is limited, a number of statements from individuals and groups, individuals who have expertise with this problem and groups who are affected in one way or another by existing law and regulation. I would like to ask that they be made a part of the body of the record.

Senator CHAFEE. Certainly.

Senator STAFFORD. Mr. Chairman, I have no opening statement. I regret that another committee made it impossible for me to hear Senator Tower. But I am sure the more illuminating and penetrating things he has said is the result of his having ancestors from the State of Vermont.

Senator TOWER. My great granddaddy came from Vermont. He had the great judgment to move to Louisiana.

My grandfather had the good judgment to immigrate from Louisiana to Texas. We found that the supply of water diminshed as we moved west, and as Senator Bentsen has said, a lot of these things that are regarded as navigable under the law or the regulations, simply, isn't a good part of the year.

To call that navigable is crazy. Even when you have water in there sometimes, it is not deep enough for a duck to swim in. I hope you will give us some relief on it.

Senator CHAFEE. Thank you very much, Senator. We will certainly give every consideration to your suggestion.

Is Congressman Ron de Lugo here? Let's proceed with the first panel, then, with Dr. Rice; Mr. Jones; Dr. Hair; and Ms. Sharron Stewart, from Lake Jackson, Tex. If you all would come forward?

Senator BENTSEN. Mr. Chairman, I appreciate your having these witnesses, and I agree with you that this is the proper ratio to have three out of four of them from Texas. I attest to the intelligence and the ability of each of them, even though they may not entirely agree with my viewpoint on this particular issue.

Senator CHAFEE. I believe Miss Stewart has been here before. I guess that was on the Barrier Islands and the oil spills.

Why don't we start in the order listed?

Dr. Rice, why don't you proceed?

We have a panel after this, and it would be my hope that we could finish the hearing this morning somewhere toward 11:30. So we will have to observe about 5 minutes apiece.

Is your testimony tailored to that?

All right, why don't you proceed.

STATEMENTS OF DR. I. M. RICE, EXECUTIVE VICE PRESIDENT, TRINITY IMPROVEMENT ASSOCIATION, IRVING, TEX., REPRESENTING THE TEXAS WATER CONSERVATION ASSOCIATION; JAMES O. JONES, REGULATORY SPECIALIST, ESPEY, HUSTON & ASSOCIATES, AUSTIN, TEX.; DR. JAY HAIR, EXECUTIVE VICE PRESIDENT, NATIONAL WILDLIFE FEDERATION, WASHINGTON, D.C.; AND SHARRON STEWART, COASTAL RESOURCES CHAIRMAN, TEXAS ENVIRONMENTAL COALITION, LAKE JACKSON, TEX.

Mr. RICE. Mr. Chairman, my name is I. M. Rice. Senator Tower has already told you who I represent. You spoke of one of the witnesses who appeared before you, and I have also appeared before you in years past on industrial cost recovery problems.

Thank you for your support at that time, and we seek your support again on this issue.

I speak in favor of amending the Clean Water Act to restrict Federal jurisdiction over dredge and fill material. It would limit the application of section 404.

To limit the application of section 404 to truly navigable waters, I refer to Senate bill 777 introduced by the two Senators from Texas. At a time when financial management of all governments, business, and private citizens are beset with financial problems, unnecessary and nonremunerative financial burdens should be reduced or entirely limited.

My prepared statement, which you have, cites examples of section 404 requirements that result in needless costs without commensurate benefits, describes efforts of the executive branch to reform and reduce the applicability of section 404, and gives my reasons why these efforts do not produce the desired results. It also speaks to the pending administration bill to amend the Clean Water Act and why this bill will not provide the relief we seek. It addresses the wetlands issue and suggests a preferable way for the Federal Government to deal with this problem.

Finally, this statement gives additional reasons for enactment of Senate bill 777 in the broader aspects of public interest.

Numerous examples of problems brought on by 404 can be cited. The ones described have this in common: They do not involve truly navigable waters. They all involve unnecessary costs, including price escalation, while waiting for a 404 permit to be issued.

Some examples show a duplication between State and Federal regulatory requirements, with both the State and Federal processes arriving at the same solution, but the Federal process taking much longer. Some show how the opponents of water projects used the section 404 process for their own purposes, seeking to block projects entirely or to raise their costs to the point where they are no longer economically feasible.

Some show how the wetlands issue is used to inject the Federal Government into local land use planning and control. Time doesn't permit me to cover each one of these individually.

I will be glad to answer any specific questions you might have.

I would like to mention that the general public suffers when large tracts of land taken for mitigation purposes are removed from the tax rolls. County governments in Texas depend largely on ad valorem taxes. They lose revenue with no compensating increase in evaluations when land is taken for mitigation.

Individual property owners then must now have Federal permission to make use of their own properties in ways that for the first 200 years of the existence of this Government—they did not have to face. Taxpayers and rate payers must pay the additional costs of projects due to escalation, when Federal agencies take their time in dealing with section 404 applications.

Senator Tower spoke of executive branch efforts to reform section 404. Why do not these measures suffice? First, the general permits: In theory, there are many situations which can be covered by blanket authority. Some say that as many as 80 percent of the situations possibly involving section 404 are covered by general permits already in effect.

Last week, there was another group of general permits authorized. We understand that this fall there will be a third additional group which will be proposed.

Why doesn't this solve the problem? Well, the general permits are issued by district engineers under the policies of the Chief of Engineers. The policies can be changed, and the permits can be changed at the discretion of these nonelected officials. That change in administration can bring about any or all of the general permits. Courts can alter the general permits.

Currently, there is a Federal court in Texas which reviewed the 404 permits in a considerable segment of the Trinity River. It seems to me that the fact that general permits involve administrative determination of exemptions to a Federal law that may have reached 80 percent of the possible applications—and it may go higher—that seems to me prima facie evidence of a law that needs clarification.

In support of that contention, I would refer to a letter signed by 12 distinguished Senators approving Secretary Gianelli's efforts at regulatory reform but calling it only an initial step toward implementing lasting reforms of this burdensome process.

The Presidential Task Force on Regulatory Relief examined section 404, and Secretary Gianelli proposed reforms. They are aimed

at reducing processing times involved and in clarifying uncertainties concerning the wetlands.

These are long-overdue steps in the right direction, but, again, the Gianelli reforms cannot address the scope of the projects covered by 404, because this is governed by the Clean Water Act and by court interpretations. Like the general permits, these reforms can be cancelled by another Secretary of the Army.

I would like just to mention why the pending administration bill on amending the Clean Water Act, will not suffice. This is simply because that bill doesn't address 404. There are some good things in that bill. I refer to section 14, which exempts dams from the requirement pertaining to NPDES.

Senator Chafee I would speak about other reasons for not considering S. 777. The New Federalism seeks to transfer Federal programs to the States. Senator Bentsen has mentioned that the States have not taken over section 404. To my knowledge, none of them have been. I don't believe Texas will be willing to take over section 404 programs as it now stands;

A second reason is that Federal Government costs could be reduced by passing the S. 777. It costs $2 million annually to administer that program in the State of Texas, and that is about 15 percent of the total cost throughout the United States.

If Senate bill 777 were enacted, some of those costs could be reduced. This would not affect section 10 permits under the 1899 act, but it would be a significant cost saver.

Thank you for the time you have given me. My prepared statement gives much more detail. I would be happy to try to answer any questions you might have.

Senator CHAFEE. Thank you, very much, Dr. Rice.

I believe, unless there are objections from the committee, what we might do is to hear from each of the witnesses. Then we might be able to have a little discussion.

Senator BENTSEN. Fine.

Senator CHAFEE. Is that satisfactory, gentlemen?

Senator BENTSEN. Yes.

Senator CHAFEE. Mr. Jones, why don't you proceed?

STATEMENT OF JAMES O. JONES

Mr. JONES. Mr. Chairman, my name is James O. Jones. I am the manager of the Coastal Resources Section of Espey, Huston & Associates which is an environmental and engineering consulting firm based in Austin, Tex. I received a bachelor of sciences degree in oceanography and a master of science degree in environmental management.

Prior to joining Espey, Huston in 1980, I was employed by the U.S. Army Corps of Engineers in the regulatory program for approximately 7 years in the Galveston District. While at the Galveston District, I worked both in enforcement and permit processing.

I began working with the corps in 1974, shortly before the section 404 permit program went into effect, and I have been actively involved in the regulatory arena ever since.

First, let me emphasize that I am not a legislative technician, and I am not here to comment on the proposed legislation.

My testimony today represents my evaluation of the current implementation of the section 404 permit program and the effects that the proposed regulations from the Corps of Engineers may have on that program.

My view is a personal one, as I work with the section 404 permit program on a daily basis.

The proposed changes in the regulations that govern the Corps of Engineers' activities concerning section 404 are a welcome reform.

Under the present system, not enough pressure is placed on the corps districts to issue timely decisions on permit applications. Further, although the use of general permits has become more widespread over the past year, those could be and seemingly will be even more successfully implemented to reduce the workload.

In addition, further pressure must be placed on the corps to limit the granting of extensions to the comment period on permit applications.

These changes will be implemented by the new regulations that will become final next month, as published by the Corps of Engineers. However, there are serious problems that the regulatory changes will not resolve.

First, the corps will pursue the transfer of authority to the States, but it will probably be in the form of general permits for specific activities.

I do not believe that there will be significant transfer of authority under section 404 to the States unless there are more incentives offered to the States and the States' roles are clearly and properly delineated.

Second, although the goal of the administrative reforms is to introduce a reasonable degree of certainty into the scope of the section 404 program, the very nature of wetlands does not lend itself to certainty.

The current system for defining wetlands is imprecise and inaccurate. In my judgment, the current factors for identifying Wetlands cannot be used by the average nontechnical person to make wetland determinations.

Third, the regulatory reform effort does not offer solutions to the day-to-day operational problems experienced by the districts.

I feel the administrative problems which have developed in the districts are not entirely due to an overwhelming increase in the number of permits being processed or delays caused by the commenting agencies.

Many are the result of clerical delays within the district office.

Fourth, the regulatory reform effort does not encourage administrative assistance from the private sector. This assistance can range from managing office information and permit applications to giving the applicant the option of printing his own public notices at his own expense. Such help would alleviate those districts which are already overloaded and cannot handle their existing workload, much less develop general permits while dealing with the cuts in manpower.

Finally, let me say that my testimony is offered in the spirit of cooperation. I emphasize that my observations are made with the current problems that do exist. Regulatory changes are being made that will alleviate some of these problems, but not all of them.

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I reiterate that I am not a legislative technician. I deal with the law once it is made, and therefore I am not going to comment on the possible perameters for a legislative change.

I will assert, however, that I see room for a legislative change that would help clarify some of the problems as set forth, and I would welcome that change.

Again, I thank you for allowing me to testify before you today.

Senator CHAFEE. Thank you, very much, Mr. Jones.

We appreciate that. We will put your full statement in the record.

Mr. JONES. Thank you.

Senator CHAFEE. Dr. Hair.

STATEMENT OF JAY D. HAIR

Mr. HAIR. Thank you, Mr. Chairman and members of the subcommittee for the opportunity to appear before you today.

As you have requested, I have substantially abbreviated my comments and ask that the full written statement and supporting resolution be entered into the record of this hearing.

My name is Jay D. Hair. I am the chief executive officer of the National Wildlife Federation. In addition to the National Wildlife Federation, the statements I am presenting here today are on behalf of the National Audubon Society, the Environmental Defense Fund, the Izaak Walton League of America, Friends of the Earth, the Environmental Policy Center, the Center for Environmental Education, the Chesapeake Bay Foundation, the American League of Anglers, Trout Unlimited, the Sierra Club, and the Clean Water Action project.

Collectively, we voice our strong opposition to S. 777. Our organizations represent over 5 million concerned, responsible, conservation-minded citizens in all 50 States and territories. This broad basis of support demonstrates the public concern for continued preservation and enhancement of our wetlands and water resources.

S. 777, once again, raises the fundamental question of whether the Clean Water Act will continue to control water pollution or simply be reduced to a navigation law.

When the act was enacted 10 years ago, Congress fully intended for the law to preserve and enhance the chemical, physical, and biological integrity of tbe Nation's waters by controlling the discharge of environmental pollutants into these waters. S. 777 would have this Congress, at this time, now radically retreat from its 10-year commitment to protect all of this Nation's waters, especially its wetlands, and turn the clock back to 1972 when the Federal Government's principal concern was navigation.

S. 777 is an unjustified attack on the Nation's wetlands, and particularly, the section 404 program. It ignores the tremendous values of our wetlands, eliminates the vast majority of Federal control, and misrepresents how the section 404 program is being implemented.

S. 777, if enacted, would have a disastrous impact on our wetland resources. The restrictive definition of navigable waters in S. 777 would remove from Federal protection 85 percent of the Nation's

wetlands or 126 million of the 148 million acres currently covered and hundreds of thousands of miles of rivers and lakeshore lines.

Examples of exempted wetlands are provided in full written statement.

Also, the impact of S. 777 is not limited to section 404. It will exempt all waters which have ever served as waters of commerce in the past from regulation under the 1899 Rivers and Harbors Act. These so-called historically navigable waters have been protected since at least 1921.

Also, exempted from the Rivers and Harbors Act are activities on nonnavigable waters that would adversely impact navigable waters.

Currently, the Federal Government can regulate activities beyond the limits of navigability if they adversely affect the navigable waters.

S. 777 would have a serious impact on the chemical, biological, and physical integrity of all of our Nation's waters, including the navigable waters.

For example, S. 777 would prevent the Federal Government from regulating the discharge of contaminated dredge or fill material into nonnavigable tributaries and wetlands. Because our waters are ecologically interrelated, contaminated dredge and fill materials containing PCB's, arsenic, kepone, DDT, mercury, and other pollutants that are discharged into nonnavigable waterways will find their way, ultimately, into our navigable water systems.

Whether discharged into nonnavigable or navigable waterways, these contaminants will adversely affect water quality, pose various human health risks, and harm fish and wildlife resources.

We are concerned that S. 777 would shift the burden of compliance under section 404. Currently, the applicant carries the burden of demonstrating that dredge or fill activity complies with the section 404(b) environmental guidelines.

S. 777 would shift that burden to the corps by requiring permit issuance unless the corps can demonstrate noncompliance with the guidelines. This shifting burden would increase the corps' workload and could, in turn, slow down permit processing in direct conflict with the stated purpose of S. 777.

Also, by eliminating control over dredge and fill activities in nonnavigable waters, notwithstanding any other provision of law, S. 777 would prevent the regulation of dredge and fill activities under other laws, including the Endangered Species Act, the Marine Mammal Protection Act, the Fish and Wildlife Coordination Act and the Bald and Golden Eagle Protection Act.

Section 404 is not causing unnecessary delays in project development as some have argued. Very few permits are denied. While certain applications have required lengthy processing time, the section 404 program should not be judged solely on the basis of these applications for several reasons:

First, the delay is frequently justified because the proposal is controversial and has received objection from one of the Federal agencies, either the EPA, the Fish and Wildlife Service, or the National Marine Fisheries Service.

Second, most responsibility for what delay there is rests with the permit applicants. EPA and the corps report that applicant inaction is the primary cause of delay.

Third, it is inappropriate and misleading to view the program on the basis of worst case examples. Rather, the program should be judged on the basis of its overall performance.

Fourth, to the extent delay exists, that delay does not justify exempting 126 million acres of wetlands from regulation. The U.S. Army Corps of Engineers Institute for Water Resources recently conducted a detailed 235-page impact analysis of the corps' permit program. While recognizing that there are costs associated with permit processing delays, the Institute for Water Resources concluded that "the current baseline operations of the Corps of Engineers regulatory functions program results in a net positive benefit to the Nation * * * most of the regulatory program benefits accrue due to avoiding costly water quality contamination, navigation obstruction and safety risks, and excessive wetland loss."

Senator CHAFEE. Dr. Hair, your time is up. We will give you a minute or so to wind up.

Mr. HAIR. I would like to, sir.

Thank you. S. 777 incorrectly asserts that the section 404 permit program has not benefited the Nation. Section 404 is credited with reducing the yearly loss of wetlands from 600,000 to 300,000 acres. In view of the considerable values of wetlands, section 404 has benefited this Nation greatly. Finally, we believe our Nation's wetlands are already in trouble. Barely more than half of them remain. One million acres of coastal marsh have been lost in just the last 20 years. We are losing wetlands at a rate of 300,000 acres per year.

S. 777 is a misguided bill. Posturing as a bill to eliminate delay in the construction of needed projects, it would have this Congress abandon the Federal interest in water resources of national importance. Amending section 404 of the Clean Water Act to narrow its coverage to navigible waters will not serve the intended purpose of S. 777.

Such an amendment, however, places the Federal Government squarely behind those who would drain, fill, or build over our wetland resources. Left unprotected, our wetlands will be destroyed. We already know that from history.

Section 404 is a vital section of a vital piece of pollution control legislation. It has not been used to stop development, but instead has mitigated some of the damage caused by development. Section 404 was designed to protect our water and wetland resources. This protection cannot be achieved by limiting Federal involvement to the navigable waters.

I respectfully urge this subcommittee to stop S. 777 here and not allow it to go to the full committee. We feel the future of this vital part of our Nation's natural heritage is in your hands.

Thank you, sir.

Senator CHAFEE. Thank you, very much, Dr. Hair.

We appreciate your testimony.

Miss Stewart.

STATEMENT OF SHARRON STEWART

Ms. STEWART. Thank you, Mr. Chairman and members of the subcommittee.

I am pleased to be here today on behalf of the Texas Environmental Coalition. We do have some estimates for the areas of coastal wetlands in Texas that would be removed from section 404 jurisdiction by a proposal such as that in S. 777. Assuming that the mean high water line would encompass some 30 percent of adjacent wetlands into the navigable water unit, 91.6 percent or 378,000 acres of Texas coastal wetlands would be removed from protection under section 404.

If 100 percent of the coastal marshes, as defined by their dominant vegitation pattern, were included in the amended section 404 jurisdiction, some 74.4 percent or 307,000 acres of the coastal wetlands in Texas would still fall outside section 404 jurisdiction.

Most would be virtually without regulatory protection under Federal or State law, since more than half, and possibly up to 70 percent of the affected wetlands, are in private ownership.

The financial impact of this proposed reduction in section 404 jurisdiction is assignable to numerous sectors. The findings in S. 777 assert that the needed developments have been delayed under current law without commensurate benefit to the Nation. The costs of delays undeniably are substantial as compared to a situation in which there is no regulation.

The delays due to the asserted nonbeneficial administration of existing laws have been found insubstantial, by interpretation of the information collected by the Bush task force, when compared to the horror stories spread by developers disgrunted at having to subscribe to any regulatory system that limits their free depletion of renewable natural resources.

The facts regarding delays attributable to existing law and the findings of S. 777 do not substantiate the need for legislative remedy. The Bush task force reports that of the over 100,000 actions annually affected by the Corps of Engineers' regulatory program, 90 percent are processed under provisions of general permits.

Our experience in processing of general permit activities in the Galveston corps district is that response can be secured regarding the proposed activity within a period of approximately 3 to 21 days. Of the 18,000 applications that require individual action by the corps under section 404 and/or section 10, 43 percent are for section 10 permits. Our observation is that these rarely run into delays other than application form errors, and that 40 percent are for section 404 and 10, combined, permits. The remaining 17 percent, or about 3,000 of these applications, are for section 404 permits. Over 70 percent of the permits, according to the Bush task force, were processed without delay, delay being defined by the task force as processing time in excess of 120 days.

The remainder experienced difficulties that ultimately led to delay costs that the task force, by very rough estimate, stated to be in excess of $1.5 billion annually. It appears that these costs were calculated to accrue from idled sunk capital, interim price increases and reduced expected return on investment based upon the

projected lifetime, the last of which is a hazy projection at best, and probably represents the largest portion of the estimated cost.

The delay cost can also be viewed to be of reduced significance if it is considered that it applies largely to a very few applications for large projects of a nature that would make them controversial under any regulatory regime that examined their destructive impact on natural resources. And many of these, if they are port or port-related projects, would experience no relief should the provisions of S. 777 be adopted.

The financial benefits of wetlands protection afforded under section 404 are many and have been recited to this and other committees many times. The renewable resource values attributable to wetlands of just a few areas of interest easily overshadow the delay costs when dollar values are attached to wetland benefits such as water purification, flood control, fisheries production and waterfowl habitat.

The proposed S. 777 would, in Texas alone, leave on the order of 300,000 acres of coastal wetlands essentially without regulation. We have no good figures at all for the additional area phase II or III waters that would be impacted. It is important also to recognize that these wetlands that would no longer be under regulation in the coastal area, are, to a large extent, in estuaries that support the water quality and habitat attributes which provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water, a primary goal of the Federal Water Pollution Control Act.

In our view, section 404 as written is appropriate to the goals of the Federal Water Pollution Control Act and requires no amendment. The findings of S. 777 are sufficiently broad to condemn virtually any body of regulation that addresses the protection of the Nation's natural renewable resources. We do agree that instances can be found where the administration of section 404 resulted in unnecessary delays for permit applicants, but the Bush task force, combining the history of the administration of section 404, did not turn up substantial information to verify the assertions of many developers that section 404 as written in the act is operating contrary to the best interests of the Nation, nor did the task force find the information that the goals of the Federal Water Pollution Control Act in any way flawed, or in need of revision.

The agencies responsible for the administration of section 404 have reported that they are seeking means to better administer the 404 permit system. We see this as a worthy aim, but we certainly caution them to be sensitive to the spirit and goals of the act, and in their zeal for reform, to not overlook the significant policies of the Nation regarding the intent to maintain and enhance the qualities of the waters of the United States.

It does appear that the agencies, even with manpower reductions, are capable of reducing the processing time required for many individual permits. They should be encouraged to continue in this effort. The mechanism of the issuance of general permits is producing satisfactory results, and its further use in appropriate situations will certainly serve to reduce the time necessary for securing permits in noncontroversial situations.

In addition, from our own experience, we encourage the voluntary participation of agencies and applicants in preapplication conferences, and the agencies should better publicize the availability of this practice. The practice should not be mandated, in our opinion, because it would probably then lead to a new level of administration requiring rules of procedure, et cetera, and the applicants may feel the need to solidify positions in advance of a formal conference that could actually increase the potential for delay in the permitting process.

We are also of the opinion that if the reviewing agencies were afforded funds for expanded research programs, in the long run they could reduce their review time requirements by encountering fewer applications that required individually directed research in order to respond in accordance with their statutory mandates.

Thank you. I will be pleased to answer any questions, particularly those in regard to issues brought up today, and I would also say I personally agree with Dr. Jones' statement regarding problems in the Galveston office due to administration problems.

Senator CHAFEE. Thank you very much, Ms. Stewart. I think the points that you made regarding the procedures and techniques we might use to speed up the processing is similar to that that Mr. Jones made.

Let me ask you a question Doctor Rice. The stastics as given by Doctor Hair and, indeed, the statistics we have from EPA are that of the total wetlands in the United States in the area of 150 million acres, only about 5 million would be covered under this act.

We can argue whether it is 5 or 10, but whatever it is, it is a teeny portion of the total wetlands. Would you agree with that?

Mr. RICE. I have no figures to dispute those numbers, Senator Chafee.

Senator CHAFEE. Those are the statistics that we have from EPA's estimates.

Second, accepting that most of the wetlands in the Nation would not be covered as a result of the changes proposed to 404, I think we do agree that wetlands are absolutely critical for the habitat of wildlife, both for the birds, and game birds, and for the fish and shellfish, furthermore, wetlands provide an extremely important function in absorbing overflowing waters so that flood conditions are reduced. You are familiar with that?

Mr. RICE. Yes, sir.

Senator CHAFEE. What you are saying to us is that all may be true, these vital functions that wetlands perform, and nonetheless, we are going to remove it from the only protection that they have now, which is the Federal Government, and turn it over to the farmer, to the developer, to whoever happens to own the land because he has a right to develop his property.

Indeed, if you read in the examples that you gave, that the farmer that could not use all his land for soybeans or rice or whatever it is, what is going to be the effect on the Nation if we follow your recommendation?

Mr. RICE. First of all, we have a problem in understanding what wetlands are. The definition, as far as I can find, it is where plants can tolerate being immersed all the time. We see examples where businesses are prevented from carrying on their operations be-

cause—I am speaking now of the *Lambert* case in Florida. I expect you are familiar with it—this man is complying with State regulations in the disposal of his refuge because some of these water tolerant plants are found on his disposal site property, the Corps of Engineers has sought to put him out of business. The courts have not supported this. It is still in the court.

Senator CHAFEE. But for the sake of my question, if you might, Dr. Rice, let's not take the worst case. Let's take what you are attempting to do, and supporting, namely, only navigable waters. Let's take the clear case of a swampland, of a marshland, of a wetland. Anybody can recognize that, yet it is clearly not a navigable water.

What are we going to do? Under your proposal, that is up to the owner of the property, is that correct?

Mr. RICE. Not only the owner of the property, but also the State, if they desire to control it in any way, or any other subdivision of government within those areas in which that piece of property might lie; not only the Federal Government, but the State and local government, as well.

Senator CHAFEE. My concern, Mr. Rice, is that these are really national resources, and the estimates we have are that in the history of the country, we already have lost over half of our wetlands and that they are disappearing at a frightening rate in Louisiana and in some of the Western States.

So who is going to do something? Are we going to say here, on this committee, and in this Congress, that, 'Sorry, but the good old free enterprise system must operate" and trust that the farmer who wants to drain the wetlands to increase his production, that is all for the benefit of the Nation; we will have more food, but we will have less wetlands?

Mr. RICE. I say that if the Federal Government, if the people of this country, want to exercise that control, let there be specific legislation, let there be definitions of wetland; let there be demarcation of what we are talking about. But let's not do it under the cover of withholding of the section 404 permits, which I don't believe Congress set out to do in the first place. If the people want to control that wetlands, what about the nonwetlands? Those are important to wildlife also, and also to farmers.

We are talking about this fringe area, this marginal area between the water and the land.

Senator CHAFEE. If I might, Dr. Rice, we are really not talking about a fringe here. You were delineating it that we stop with navigable waters. That is what the proposed amendment does, and so you are not just taking some fringe area. You are taking over 85 percent of the wetlands out of the coverage of the presently existing act.

Now, as to whether Congress intended to do it, we clearly did intend to do it, because we didn't make a reversal in 1977 when we took up this act.

Mr. RICE. I suggest that the way to do it is by clarifying it. Let us pass S. 777, and if there is a desire on the part of the people to impose some new control, let there be new legislation that is clearcut that we can all understand, but not use as I call it, the back-

door method of using section 404 in a way that I don't believe it was intended.

Senator CHAFEE. Dr. Rice, you are proposing a very dramatic change in the protection of the wetlands of this Nation; you are supporting this in your suggestion here. In my judgment, it has extreme ramifications in a whole series of areas, in flood control, in ground water.

My time is up. Who is next?

Senator Bentsen.

Senator BENTSEN. Mr. Chairman, I think your statement presupposes that the States wouldn't do anything or that you would be going back to what the situation was in States 20 years ago. There is a great deal of sensitivity and awareness on these issues in the States. It is not all just here in Washington.

You have people like Sharron Stewart who are concerned, who do represent a coalition of people within the State, and who, I think, make constructive suggestions and have influence. My own legislation that I have introduced in the past does address the wetlands and includes the wetlands along navigable streams and means that those wetlands on navigable streams would be covered. We have a permitting process within the State of Texas that is trying to address wetlands.

I assume that these efforts would be even further buttressed if legislation—something along these lines—passed. I look on this piece of legislation as a starting point of discussion. I, for one, would favor a modification along the lines of what I had originally proposed that would cover the wetlands adjacent to navigable streams.

But let me get to this other point about posturing, as Dr. Hair states, insofar as the delay in permitting. I just can't agree with that at all. Let me state that down in the Rio Grand Valley, where we have had serious flood problems, an area that wanted to construct a major drainage channel to alleviate severe flooding, it took years to get a permit, not 90 days, years, because you had one ranch owner that didn't want that channel going across that ranch, and you had hundreds of thousands of people suffering from excessive flooding and willing to tax themselves to take care of that problem.

But that one person utilizing the 404 process was able to block them all. Repeated flooding afterward, millions and millions of dollars' worth of damage, and personal suffering as a result of it, a permit was issued. It is my concern and my very primary concern that you have got an example here of one where it took on the Choke Canyon Reservoir; That is an example that was given where the State process consumed 120 days and the Federal process took 602 days, and the Federal actions duplicated the State of Texas regulatory process, arriving at substantially the same results. It took six times as long to get the job done.

I would like to see us make some headway against that kind of a situation. You have got the problem in Houston, repeatedly, am I told, of the delays there where the city has been trying to do things to take care of flood control on nonnavigable waters. Yet the will of the people has been thwarted over an extended period of time as a result of that.

I think going to the playa lake example is really going too far on the Federal Government's side, an infringement. Many of those lakes don't have any outlet to any navigable stream and are confined within the limits of one owner's property. Much of the time, those particular playa lakes stand dry. Yet, for the Federal Government to argue that 404 applies, I think, is extreme.

I really think that a presumption that the States have no concerns for their wetlands in this day of enlightenment is an erroneous presumption.

Let me also ask Dr. Hair this. He made a point that he doesn't sanction all of the new nationwide permits. Which ones don't you sanction? Then I would like comment on the change on regulatory impact that deleting those type of permits would have.

Dr. HAIR. First, Senator, let me comment on some of your earlier statements, because they were directed toward a statement I made. I am certainly not unsympathetic with the problems you mentioned, but I think you would probably appreciate as much as anyone in this room that there are no easy answers to difficult questions and that these are difficult questions. But we must not try to pass or reauthorize legislation based on perceptions. We must do it based on the best available data and in a manner supportive of the general public and the greatest national needs. I think you pointed out some exceptions rather than what the general case is.

As far as the nationwide permits, as I understand it, there are two general types: permits for categories of activities, and permits for categories of water. I understand that Assistant Secretary of the Interior for Fish, Wildlife and Parks, G. Ray Arnett has said that the permits for categories of water are, in fact, illegal. I would concur with that and support his conclusions.

There are 25 nationwide permits for categories of activities. I think that we, at this point, would support 20 of those permits for categories of activities under the Clean Water Act. We submit, however, that the remaining nationwide permits for categories of activities do not comply with section 404(e). They include:

First, the permit for oil and gas exploration activities on the OCS (33 CFR 330.5(1)(8);

Second, the permit for hydropower projects (33 CFR 4330.5(a)(17));

Third, the permit for surface mining activities (33 CFR 330.5(a)(21));

Fourth, the permit for activities authorized, regulated or funded by another federal agency (33 CFR 330.5(a)(23)); and

Fifth, the permit for activities permitted by a State (33 CFR 330.5(a)(24)).

Each of these permits have two things in common. First, COE has unlawfully delegated its responsibility for ensuring compliance with section 404 to another State or Federal agency. Congress delegated that authority to COE. Second, activities authorized by these permits will have an immense impact on the environment. As with the nationwide permits for categories of waters, COE provided no quantitative data on the environmental impact of these permits.

Senator BENTSEN. Let me ask another one of the panelists. If this bill deals with only 17 percent of the permit activity, it seems to me that the magnitude of the impact must be much smaller. Does

anyone on the panel know what percentage of the permits is in nonnavigable waters, outside of the coastal wetlands area? Does anyone know that number? Give me a reasonable approximation.

Mr. HAIR. My understanding is that it is 17 percent, Senator.

Senator BENTSEN. I am told my time is up.

Senator CHAFEE. Senator, we will have a chance to get back. I would just like to interrupt briefly at this time. Senator Murkowski is here, and also a distinguished former member of this committee and I believe, Senator, you and Senator Symms would like to introduce some of the panelists who will be coming on the next panel?

Senator MCCLURE. Yes, Mr. Chairman.

Senator CHAFEE. We would be delighted, because we know you have a busy schedule, so why don't you proceed?

STATEMENT OF HON. JAMES A. McCLURE, U.S. SENATOR FROM THE STATE OF IDAHO

Senator MCCLURE. Mr. Chairman, I appreciate your courtesy and the forebearance of the present panel in permitting me to do this. I am hearing testimony from the Department of Justice on the ABSCAM hearings, and I need to get back over to that hearing, but I didn't want to come before this committee where I served for several years with a great deal of pleasure not only to introduce the witnesses from Idaho who will appear, but also to express my concern about the subject matter upon which you are holding this hearing.

As you know, earlier in this year, I joined with Senator Murkowski in introducing legislation to reverse the decision that dams could be considered as point source polluters for purposes of the NPDES. I think it is clear, Mr. Chairman, that this was never the intent of Congress, and it makes very little sense, either economically or administratively, to force an EPA permit system on 2.3 million dams in this country which would be the result if the decision is allowed to stand.

I wish I could stay and listen to all the testimony. I can't do that, and I have to return to the other committee, but I do have the pleasure of introducing one of the truly outstanding citizens of my State and a nationally recognized expert in the field of water resource law, who also happens to be a close and valued personal friend of mine, John Rosholt, whose testimony will be of great value to this committee.

I know the committee will listen with great care to his statement. It is well worth listening to. I would like the record to show that I associate myself with the testimony that he is going to give to you this morning.

I would also note that Idaho is further well represented at this morning's hearing with the appearance of our State water engineer, Mr. Ken Dunn. His opinions and comments will also be of value to this committee. He is a real expert. I appreciate the fact that both are here. I appreciate the fact that this committee will hear their testimony, and I am only sorry that I can't stay and listen myself.

Senator CHAFEE. Thank you very much, Senator, for being here to introduce these two distinguished Idahoans. We look forward to hearing from them.

Senator Symms, did you have any comment at this time, or did you wish to wait?

Senator SYMMS. Why don't you go ahead, Mr. Chairman?

Senator MCCLURE. Thank you very much again.

Senator CHAFEE. Thank you.

Senator Murkowski has a statement, I believe. He has to go, so why don't you, as a distinguished member of this committee, go ahead?

STATEMENT OF HON. FRANK H. MURKOWSKI, U.S. SENATOR FROM THE STATE OF ALASKA

Senator MURKOWSKI. Thank you very much, Senator Chafee and fellow colleagues.

I appreciate your accommodation. I am chairing the Water and Power Subcommittee hearing, and we have recessed for a few moments.

I want to also say I am going to speak on wetlands very briefly this morning, and I have a statement concerning dam regulation as a point source of pollution, as well, which I would like to present at a time that would meet with your schedule.

Again, I do appreciate the opportunity to address wetland permit programing.

Mr. Chairman, as you know, I am not a member of this subcommittee, so, again, I want to thank you for the opportunity to let me make this statement today on the Clean Water Act, section 404, the Corps of Engineers dredge and fill permit program. As you know, you helped provide the chance for this subcommittee and the staff to come to my State of Alaska to hold field hearings on July 8. I am most appreciative. The hearing focused on the impact of the section 404 program in the State of Alaska, how the agencies directly responsible for implementing the program are working together, and to examine the application of the wetland definition in Alaska.

I emphasize definition, Mr. Chairman.

The hearing record from that event will be very useful to the members of the subcommittee and the full committee when this matter is reviewed.

Let me put the program into perspective briefly for you as it relates to our State.

Alaska, according to documents from the Corps of Engineers, contains the largest acreage of wetland in comparison to anywhere else in the United States. Fifty-seven percent of our State, or approximately 175 million acres of land, fall under the loose, the very loose definition of wetlands. The North Slope of Alaska, where the United States largest producing oil fields are located, is over 75 percent classification wetlands. Most of these lands are either State or Federal lands.

Only the populated areas have significant quantities of privately owned land. As of February 1982, less than 1.8 percent of our total land mass was privately owned. These are also the areas of great-

est conflict between wetland and water quality protection versus development. In the municipality of Anchorage, Alaska's largest city, the local government is attempting, with aid from the State, to delineate the wetlands in their area.

The identification of wetlands in any given area is perhaps the biggest problem to the people that have worked with this program. In some instances, in Alaska, landowners have found that they are subject to this program, and they did not know that they were located in a wetland area.

Mr. Chairman, wetlands can change in Alaska. An area can be designated a wetland today, can have a forest fire tomorrow, and the entire change of the plant structure, which would reclassify it, and these things just are not provided or considered in the definition.

Mapping of critical wetlands is the key to a successful program. The Corps of Engineers has been partially successful in helping and assisting some communities in identifying these areas, but their abilities are, of course, limited. There is no provision in the Clean Water Act for identification of wetlands.

I believe if we considered some type of assistance in this area, we would have a more successful and responsive program, and one that is more widely accepted by the public. The greatest difficulty that I have heard from the witnesses during the hearings was the confusion that results from different definitions of wetlands.

Federal and State agencies, Fish and Wildlife Service, Corps of Engineers, Environmental Protection Agency, the Alaska Department of Environmental Conservation all have different definitions of wetlands, as was brought out at the hearing. They each have a different application of that definition. You can imagine the state of the public in that instance.

In Alaska, due to our extreme environment, many people cannot determine for themselves whether they are in a wetlands or not. They may have 4 or 5 inches in the spring when the snow melts. There may be permafrost under it all year. Often in Alaska wetlands 1 year will be so dry, as I have indicated, there are forest and tundra fires in the next year.

The district engineer for the corps even stated during the hearing that the only way an individual could really determine if they are in a wetland area is to have the Corps of Engineers do an onsite visit. The best way to resolve this problem is to have one definition of setlands that all Federal agencies and State agencies apply with the same consistency. A statutory definition would help the agencies and the public. This would not hurt the application or jurisdiction of the program or the environmental or ecological concerns but would help to clarify problems as they do exist, and respectfully, Mr. Chairman, they do exist in our State with 57 percent of our land mass considered wetlands.

I urge the subcommittee to incorporate a definition, an understandable definition of wetlands in the reauthorization of the Clean Water Act. I thank you for this opportunity, Mr. Chairman.

Senator CHAFEE. Thank you very much, Senator. We appreciate your taking the time to come here. Obviously, you will have further input into this as we move along.

Senator STAFFORD. Mr. Chairman, before our colleague leaves, he used the words "dam regulations." I wondered if he was using the word "dam" as an adjective or a noun.

Senator MCCLURE. I was using it as a point source of pollution.

Senator CHAFEE. Fine. Thank you very much, Senator Murkowski.

Senator Stafford, we will continue with the questioning of the panel.

Senator STAFFORD. Thank you, Mr. Chairman.

Dr. Rice, I heard no dissent from the resignation of the importance of the wetlands which the chairman of this subcommittee delivered earlier in our discussions, his observation that we have lost about half of the Nation's original wetlands up to the present time. I note also that we are losing about 300,000 acres of wetlands each year now according to the evidence that has been introduced here this morning.

Does that worry you?

Mr. RICE. Well, sir, over a hundred years ago, the city of Houston was developed on Buffalo Bayou, the area of which would today qualify as a I dare say under the present rules, we could have never had the city of Houston. All wetlands, in my judgment, are not sacred, not to be preserved totally. There has to be some reason. Yes, we agree the wetlands are important. It's just—let's understand what we are talking about; let's put everything in perspective. That is all I'm asking.

Senator STAFFORD. Then I gather you are not worried that half of them have gone and 300,000 acres or more a year are leaving?

Mr. RICE. I say again, it is a question of priorities. Should we have preserved the site of the fifth largest city in the United States because a good deal of it was classified by some persons, not all, but by some persons as wetlands? I say no. The development and use of that land for a city is more important to the State.

Senator STAFFORD. I might address the same question to you, Dr. Hair.

Mr. HAIR. I wouldn't want to use the specific example of the city of Houston. I should point out to this committee that in addition to being chief executive officer of the National Wildlife Federation, I have, for the last 10 years, been involed actively in wetlands research, particularly in the Southeast. So I do have some direct professional experience with the topic under discussion today. Wetlands are clearly the single most important category of habitat that we have, from every angle, from the strictly fish and wildlife view, ground-water recharge, flood control; you name it, wetlands are the most important. It is absolutely staggering how many acres of wetlands we have lost. It is absolutely staggering how many acreas we continue to lose each year. We simply must halt the decline of these important natural resources. It is in the national interest to do so.

Senator STAFFORD. Thank you.

Mr. Jones, could you offer the committee any observations as to why no States have taken advantage of section 404 and assumed responsibility for the dredge and fill permitting programs?

Mr. JONES. Mainly because there is no benefit to them and, too, many strings attached.

Senator CHAFEE. Pardon me? I missed that; it is no benefit to them and what?

Mr. JONES. There are no benefits offered to the States, and there are too many restrictions attached to them.

Senator STAFFORD. Dr. Hair, has the section 404 programs under existing regulations improved interagency coordination in your opinion?

Mr. HAIR. I think it has certainly increased the ability of the Fish and Wildlife Service, the Corps of Engineers and the National Marine and Fisheries Service to look seriously at the question of mitigation, so I would say yes, it has improved it.

Is it perfect? No, it never is, and probably never will be, but certainly there has been a significant improvement.

Senator STAFFORD. Thank you.

Thank you, Mr. Chairman.

Senator CHAFEE. Senator Gorton.

Senator GORTON. No questions.

Senator CHAFEE. Senator Symms.

Senator SYMMS. No questions, Mr. Chairman.

Senator CHAFEE. Ms. Stewart, do you have confidence that the states could handle these problems if the Federal Government backed out of the area?

Ms. STEWART. My experience is within the State of Texas, and no, I do not believe so. I believe the State of Texas, who actually would like to see 404 delegation, they would like to do so over all 404 waters; classifications 1, 2, and 3 waters were given that responsibility. They could not handle it without Federal dollars attached to doing it. I do not think it would be a wise idea for that to happen.

Senator CHAFEE. Suppose we didn't go as far as the class 1 waters, but just went to, say, the class 3, we backed out of that and enacted this proposed legislation?

Ms. STEWART. I don't believe the commitment on the part of the State to handle it is there. I wish I did. I do agree with Senator Bentsen that we are far better informed in the past decade than we have been about our problems, but I do not believe the commitment on the part of the State government is there to handle it.

I would like to give an example, and that is the one that has been discussed here most today, and that is the playa lakes, or the high plains and panhandle. There is 16,000 to 20,000 playas, and they evaporate very rapidly. They are very important. They cover the Ogallala and Aquifer, which is rapidly being depleted, in some places as far as 2½ feet per year. They are important to human resources for water consumption, and they are important to wildlife resources. They are the second most important area along the central flyway of the United States, which involves us with migratory bird treaties with Canada and other national commitments.

The playas are used for many different things. They are used for waste disposal pits for industry; they are used as municipal land fill sites; they are used as feed lots; they are used for farming; they are used for grazing; they are also used as dump pits for oilfield wastes and brine disposal, and those are not good uses, all of them, for playas.

One of the beneficial things is when a farmer does what is called pitting and trenching. They dig a hole at the end of the playa so the water will collect there. Then in periods of drought, the water will remain. This can be beneficial to wildlife resources, but it has to be done in a specific way. Now, the trenching means that they are using this water for irrigation. They trench the water out of the playa and back in, so they are recycling the water. It is a good practice, a good use, but what we need to do is maintain the literal zone of vegetation along the playas. This can be done. It has been recommended by a method called stairstepping where you take one side of the playa, and you slope it in stairsteps. So as the evaporation level goes down, you are still maintaining the proper kinds of vetetation to support the critical wildlife on and waterfowl habitat of the high plains and panhandle area.

These things can be worked out. They can be worked out very easily. We need to do basic research on biological, ecological and the economic effects of the playas. We haven't done that.

Another problem is with the cattle. By fencing the playas in certain ways, the cattle can use the playas for water resources and not destroy all of the literal zone that is important for wintering waterfowl and for spring staging for important shore birds and sandhill cranes, and others that are important.

The high plains are an important area, there is no doubt about that. There has been a tremendous amount of misinformation put out by the Soil Conservation Service and farmers in that area. They need to be brought into the process.

Preapplication hearing conferences between local farmers and commenting agencies of the State and of the Federal Government could determine standards by which general permits could be issued for the playas and resolve the controversy that has been brewing since 1980 over the playa situation, and this is not going to require a change in 404 to do this.

But the suggestion as proposed by TEC would handle the situation in playas. It is basically a problem with misinformation.

Senator CHAFEE. Fine. Thank you very much for those very thoughtful comments.

Senator Bentsen.

Senator BENTSEN. I think again we get back to the problem of incredible delays in the process, and I do not think it is just an aberration. I think that that has repeatedly happened.

Again, it has to be a matter of major concern to us. The question is why the States have not taken over the authority? Because it doesn't give them the authority. It is subject to the veto process, so why go through the process if someone in the Federal Government retains the right to veto? I stated that would be the result in 1977 during the debate, and that has been the result. So there have been so many strings attached to the delegation of that authority that it has no force whatsoever. It has not been realized. Once again, I stated that I look on this particular piece of legislation as the starting point for the debate in trying to find those things that will be effective and that will work. In my own piece of legislation that I introduced on this, the wetlands adjacent to navigable streams would be protected. I do think that the height of awareness of the States at the present time would result in affirmative action being

taken to protect those things under their jurisdiction. When it comes to the question of having to have Federal moneys to take it on, and I look at a Federal Government that is going to be facing over the next 3 years, $300 to $400 billion in deficits, according to the Congressional Budget Office, and the State of Texas facing a surplus in its budget, I don't quite understand why the State of Texas needs Federal money to carry on that kind of an authorization, with all due respect to my friend from Lake Jackson.

Senator CHAFEE. Thank you very much.

I want to thank the panel. I think that the subject of 404 is one of the most important matters under the act. I think the wetlands are of incredible value to our Nation. As has been mentioned before in a whole host of areas, they stretch way beyond the clean waters; the value of the wetlands go to flood control and the shellfish and the wildlife and those matters that we have been mentioning. Thus it seems to me it behooves all of us to give this matter extraordinary, careful attention.

Thank you.

Congressman de Lugo, I understand, is here, and if you have some comments, we would be delighted to hear them.

STATEMENT OF HON. RON de LUGO, A DELEGATE IN CONGRESS FROM THE VIRGIN ISLANDS, ACCOMPANIED BY J. R. KRAMER, VIRGIN ISLANDS RUM INDUSTRIES, LTD.

Delegate DE LUGO. Thank you very much, Mr. Chairman.

I am accompanied by J. R. Kramer, who is an attorney for VIRIL, which is the Virgin Islands Rum Industries, Ltd.

Senator Chafee, I appeared before this subcommittee some 5 years ago.

Senator CHAFEE. I think that was on rum, wasn't it?

Delegate DE LUGO. Yes; we are back to that.

I am sorry to say that since that time, the Environmental Protection Agency has not granted us any relief from this problem.

It is difficult to overstate the important economic and social role played by the rum industry in the U.S. Virgin Islands. Rebates of Federal excise taxes imposed on Virgin Islands rum sold in the U.S. mainland provide the single largest source of revenue to the Virgin Islands Government, some $37.1 million in 1981. In recent years these rebates—constituting about 15 percent to 18 percent of total territorial Government revenue—have provided essential financing for Government operations and numerous development projects.

The biodegradable effluent released, produced by rum distilling operations, is currently discharged through an outfall into the oxygen-rich waters of the Caribbean Sea off the south shore of the St. Croix, in the Virgin Islands, where it is rapidly assimilated without causing environmental harm. Local environmental authorities are in agreement on the benign nature of this effluent and they are concerned only about the temporary discoloration of the ocean water caused by the effluent prior to its dispersion.

This concern could be addressed quickly and economically by the addition of diffusion equipment. Despite the general consensus that

water quality off of St. Croix is not being harmed by rum effluent discharges, EPA has to this point, Mr. Chairman, insisted upon the construction of a waste treatment facility that would contribute to air pollution and possibly even create a solid waste disposal problem while doing nothing to enhance the quality of the receiving waters.

The construction of such a facility—which would be extremely costly to build and operate—is supposedly justified by a numbers game in which EPA places a priority on the reduction of the effluent's oxygen-absorbing capacity, to the exclusion of the consideration of factors of cost or even other environmental impacts. This numbers game ignores the fact that the waters of the Caribbean Sea are fully capable of supplying the oxygen to provoke the breakdown of the effluent in its present state without harming marine life.

As a result of congressional concern over EPA's actions at the time the 1977 Clean Water Act Amendments were adopted, the Agency was directed to undertake a thorough examination of the situation to ascertain whether untreated rum effluent might be disposed safely in the marine environment. EPA's response to this congressional directive was a study, the outcome of which was significantly influenced by Agency Enforcement Division personnel who had already formulated their conclusions on the subject. The study specifically failed to evaluate the very disposal option which was proposed by rum distillers and merely served to demonstrate that marine organisms cannot survive in the absence of oxygen, a point that nobody disputes.

Despite pending administrative efforts on the part of rum producers in the Virgin Island and Puerto Rico to persuade EPA to alter its approach, there appears to be little likelihood that a regulatory solution to this problem will be forthcoming.

I drafted, Mr. Chairman, an amendment printed at the end of my statement that would accomplish the ends that we seek. It would stipulate that discharges of rum effluent would not be subject to sections 301, 306, and 403 of the Federal Water Pollution Control Act if discharges occur at least 1,500 feet offshore and if the Governor of the Virgin Islands determines that the discharges will not damage water quality, endanger human health, or unreasonably limit water uses.

This would not be a revolutionary change in the administration of the Federal Water Pollution Control Act, since the Virgin Islands Government has already been granted authority to issue permits under the NPDES program. I would like to include here a letter from the Commissioner of Conservation and Cultural Affairs on this matter which I would like to be made a part of the record.

Senator CHAFEE. Surely.

[The letter referred to follows:]

OFFICE OF
THE COMMISSIONER

GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES

Department of Conservation and Cultural Affairs

P.O. BOX 4340
CHARLOTTE AMALIE, ST. THOMAS, V.I. 00801

May 11, 1982

Mr. Conrad Simon, Director
Water Management Division
U. S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

Re: Virgin Islands Rum Industries, Ltd.

Dear Mr. Simon:

On behalf of the Virgin Islands Department of Conservation and Cultural Affairs ("DCCA"), I would like to take this opportunity to respond to EPA's solicitation of comments on the Request for Reconsideration filed by Virgin Islands Rum Industries, Ltd. ("VIRIL"). As the territorial agency with the authority to issue NPDES permits under the Clean Water Act, DCCA has been intimately involved in the matters presently under discussion.

The primary concern DCCA has with VIRIL's present method of stillage disposal is an aesthetic one--its discharge tends to discolor water down current from the discharge point. We believe that this aesthetic concern would be addressed adequately by implementation of VIRIL's proposed method of stillage disposal, ocean outfall with diffusion. While VIRIL's effluent is characterized by a very high Biochemical Oxygen Demand ("BOD"), the best evidence currently available to DCCA supports the view that the receiving waters off St. Croix contain sufficient dissolved oxygen to allow oxidation of the effluent without endangering or inhibiting local marine life.

In contrast to the disposal methods proposed by VIRIL, biological treatment requirements would compel the construction of a costly treatment facility that would contribute to air pollution and create a possible solid waste disposal problem. While the BOD of VIRIL's effluent would be reduced--despite the fact that we have seen no persuasive evidence that water quality needs demand such a reduction--the dark effluent from such a treatment facility would

still discolor the local waters.

Other regulatory options create other problems. There is strong sentiment in the Virgin Islands, both inside and outside government, that land disposal of rum stillage is entirely unacceptable due to the fragile nature of St. Croix's critical ground water supply. Deep ocean outfall would be very costly to implement and the water quality benefits over disposal at the present discharge point are uncertain. Based on all the evidence presently available to DCCA, we believe that a stillage discharge method which involves the addition of diffusers to the existing ocean outfall line is a well-founded, economic method of stillage disposal and will be as ecologically benign as any other disposal option suggested to date.

I commend EPA on taking a fresh look at VIRIL's situation. To the extent that VIRIL's discharge has an effect on others, the parties involved are Virgin Islanders. Accordingly, we hope that the EPA will pay special attention to local views in considering VIRIL's request for Reconsideration and will not persist in its adherence to treatment requirements which do not make sense in the geographical, hydrological, and climatological conditions of the Virgin Islands. I trust that the EPA will continue to keep me currently advised of the status of its deliberations in this matter, since this Department bears the responsibility for issuing VIRIL's discharge permit.

Sincerely,

Darlan Brin
Commissioner

et

cc: Governor of the Virgin Islands
Mr. Cedric Nelthropp, VIRIL
Mr. Julio Brady, Federal Programs Coordinator
Mr. Nathaniel M. Rosenblatt, FRIED,FRANK,HARRIS,et al

Delegate DE LUGO. It substantiates the position that I am taking here.

Mr. Chairman, this recommendation is a change of great significance in this instance with respect to conventional pollutants, as this amendment would permit treatment levels to be based on observable environmental considerations rather than on blind adherence to presumed environmental benefits accruing from reductions in the amount of oxygen absorbed by the effluent while it is being assimilated.

Mr. Chairman, my record on environmental issues is clear and one of which I take considerable pride. Nobody in the Virgin Islands appreciates more than I do the need to insure that our islands and the environment is protected. Indeed, I would not be before you today were I not convinced that adoption of my amendment would, in fact, be more beneficial to air and water quality in the Virgin Islands than would adherence to the treatment requirements which EPA has been attempting to impose. I urge this subcommittee to insure that commonsense and good economic sense prevail with respect to environmental regulations in the Virgin Islands.

Senator CHAFEE. Thank you very much, Congressman de Lugo, and we will consider this. You very thoughtfully have given us a proposed amendment. Let us see what we can do.

I appreciate your coming. I am an admirer of your lovely islands, having had a chance to visit there, and hoping I will have a chance to visit there again.

There is a vote on now. Do you have any questions, gentlemen?

Senator GORTON. Not of this witness.

I would simply like to say, Mr. Chairman, that the combination of our previous panel and this vote and other appointments have frustrated my desire to hear the second panel. As I will not be able to return, I do have some questions for members of that panel. I would like your permission to submit them to the witnesses in writing.

Senator CHAFEE. Certainly.

We can start with that panel right away, if you want to ask a couple of questions.

Senator GORTON. There really isn't time. We are going to get five buzzes in about 1 minute, so I think you are probably correct in recessing now.

Senator SYMMS. My statement would only take about 1 minute. I might make that before you adjourn, and then we can be back and the panel can get started.

Senator CHAFEE. Thank you very much, Congressman.

Delegate DE LUGO. Thank you.

Senator CHAFEE. If that panel would come forward, now, Mr. Dunn, Mr. Rosholt, Mr. Gibson, Mr. Burwell, and Dr. Whitley.

Thank you.

Gentlemen, if you would take your seats?

Senator Symms, why don't you proceed with your statement, and then you can recess the hearing.

STATEMENT OF HON. STEVE SYMMS, U.S. SENATOR FROM THE STATE OF IDAHO

Senator SYMMS [presiding]. Thank you, Mr. Chairman.

I appreciate this opportunity to discuss the impacts of the Federal district court decision that dams are point sources of pollution subject to NPDES permitting under section 402 of the act.

To put it mildly, I am astounded that a court could reach such a ruling in direct contradiction to the congressional intent and interpretive rulings of an act that has been around for a decade.

Without exception, the Environmental Protection Agency and administrations of both parties have maintained that dams, per se, do not discharge pollutants, and as such cannot be subject to requirements for sources of discharged pollutants. The decision has severe and far-reaching impacts on the 2.3 million dams situated throughout the country, with particular effects on the West, where dams provide us with power, flood control, recreational opportunities, and irrigation water so vital to our agricultural productivity. It also would create a nightmare to the EPA, redirecting that agency's efforts from much higher environmental priorities to monitoring and licensing of facilities that, by themselves do not contribute to water pollution.

Mr. Chairman, I am pleased that John Rosholt, who represents the National Water Resources Association, and Ken Dunn, from Idaho, the director of the Idaho Department of Energy and Water Resources, could be here from my home State of Idaho to address this critical problem. I have had the pleasure of working with both of you gentlemen over the years and have found both of you to be professionals, and remarkably knowledgeable regarding water issues.

Members of the panel, as you can see, the action on the floor is pulling the Senators away. I am really hopeful that it is just one vote that we have over there. We apologize to you for the inconvenience, but I will see what I can do to round up part of the Senate so they can hear your expert opinion on this situation.

I might just say that I am also, along with Senator McClure, a cosponsor of the Murkowski bill, which would address this problem. I am hopeful that we can get some action on that later on in the future.

The meeting stands in recess for about 7 or 8 minutes.

[Brief recess.]

Senator SYMMS [presiding]. The committee will resume the hearing.

Senator Chafee has been detained on the floor momentarily. We anticipate that he will be back shortly, but he has asked that we go ahead and continue with the hearing. I know you are all busy and have schedules to meet.

Our first witness is Kenneth Dunn, director of the Idaho Water Resources. You are accompanied by Henry Silbermann, assistant secretary for the Maryland Department of Natural Resources; is that right?

Mr. SILBERMANN. That is correct.

Senator SYMMS. Welcome to the committee and please go ahead.

STATEMENTS OF KENNETH DUNN, DIRECTOR, IDAHO WATER RESOURCES, ACCOMPANIED BY HENRY SILBERMANN, ASSISTANT SECRETARY FOR MARYLAND DEPARTMENT OF NATURAL RESOURCES; JOHN ROSHOLT, ATTORNEY, TWIN FALLS, IDAHO, REPRESENTING NATIONAL WATER RESOURCES ASSOCIATION; JOHN GIBSON, ASSOCIATE GENERAL COUNSEL, PACIFIC GAS & ELECTRIC, REPRESENTING THE EDISON ELECTRIC INSTITUTE; DAVID BURWELL, STAFF ATTORNEY, NATIONAL WILDLIFE FEDERATION; AND JAMES WHITLEY, DIRECTOR, FISHERIES RESEARCH, STATE OF MISSOURI

Mr. DUNN. Thank you, Mr. Chairman.

As you said, I am Kenneth Dunn, director of the Idaho Department of Resources. Henry Silbermann and I are here in our role as members of the board of directors on the Interstate Conference on Water Problems. ICWP is a national association of State, interstate, and intrastate water agencies. I have submitted a detailed statement of the ICWP's policy, and I would like to paraphrase some of that right now.

Senator SYMMS. Your entire statement will be made a part of our record.

Mr. DUNN. Thank you.

In addition, I would like to submit a statement that was adopted by the Western States Water Council, which is an organization of 12 Western States.

The position was adopted unanimously in support of specific legislation to exempt dams from the NPDES permit system.

I would like that to be entered into the record, if I may, Mr. Chairman.

Senator SYMMS. Without objection, it shall be.

Mr. DUNN. Mr. Chairman, in a recent decision of Judge Green in the *National Wildlife Federation* v. *Gorsuch* that designated dams as point sources of pollution requiring permits to the Clean Water Act, that decision could seriously interfere with existing State mechanisms to consider water quality impacts in the construction and operation of dams. It could destroy the balance which must exist among water resource users, including consideration of water quality, and create unduly burdensome and costly administrative procedures with little or no environmental benefit.

ICWP recommends that Congress clarify, in law, that changes in water quality caused by the carriage, storage, or release of water through dams are not point sources of pollution. Most of the water quality problems of dams can be and are addressed by programs operated under State law.

Dams have been condemned for causing many adverse impacts. Forgotten, overlooked or just ignored is the enormous benefit that virtually every American enjoys from the existence of dams. The economic benefit from flood control, navigation, irrigation, municipal water supplies are universal to the people of this country. The environmental recreational benefits are also substantial, but not always recognized. Silt removal from the process of storing water is a great benefit to this Nation. Fishing, boating, and minimum flow releases to maintain fish below the reservoirs is a substantial benefit.

The major concern requiring EPA to issue NPDES permits for dams is that water quality, per se, will become paramount, destroying the very purpose for which dams were initially constructed, water quality, and other environmental concerns, are of great importance. However, reservoirs are constructed for other purposes: flood control, navigation, ireigation and hydropower. The goal should and must be a balanced approach to water management as only one of several important considerations.

This balanced approach is the situation as it existed prior to the *National Wildlife Federation* v. *Gorsuch* decision.

You must, in the interests of the people whose lives and livelihoods and well being depend on dams, correct this decision. This Nation has some severe environmental problems associated with water quality. The water quality problem that is caused by dams just doesn't happen to be one of the severe problems. The diversion of the limited resources of EPA from the existing permit programs for M&I wastewater discharges and other severe complex environmental problems simply doesn't make environmental or economic sense.

The States have and are making progress in correcting the few water quality problems that existed as a result of dam construction. Most of the water quality problems I have heard cited have been or are being solved.

Mr. Chairman, if I might indulge the committee, let me cite a few statistics from a recent questionnaire that was sent to member States of the Interstate Conference on Water Problems. Of the 35 responding States, 66 percent indicated that their State has a program other than the NPDES, which regulates construction and/or operation of dams which includes authority to consider water quality impacts. Fifty-four percent indicated there are standards or guidelines for protection of water quality which are applied in the review of permit applications for dam construction.

Fifty-seven percent report such standards for dam or reservoir operation. Responding to the question, "Are reviews of permit applications or project proposals for dams or reservoirs coordinated with your State water quality activities?" seventy-nine percent of the responding agencies said yes. Eighty-one percent also indicated that they coordinate with State fish and game agencies. Eighty-three percent of the States responding to the question, "Does your State or jurisdiction feel the dam water stored in reservoirs or water released from reservoirs should be subjected to the NPDES permit process?" said no.

Based on the above considerations, it is ICWP's view the regulatory approach called for by the *National Wildlife Federation* v. *Gorsuch*'s decision is neither the most effective nor the most efficient way of addressing water quality problems involving reservoirs. A more appropriate viewpoint of State dam permitting, coupled with State dam practices and technical assistance problems, should be endorsed by Congress. This, Mr. Chairman, concludes my statement.

Mr. Silbermann and I would be happy to answer any question that the committee might have.

Senator SYMMS. Thank you very much for a very excellent statement. I happen to share enthusiasm for the points that you are

making. First, before we start the questions, we will go through the entire panel.

Next we will hear from John Rosholt, attorney from Twin Falls, representing the National Water Resources Association.

Go ahead, John. Welcome to the committee.

Mr. ROSHOLT. Thank you, Mr. Chairman.

Senator SYMMS. I must say, before you start that I apologize for the attendance here this morning. It is a problem that we have in the Senate. Many of the Senators are talking about, that the Senate will have to get to the point where we can have legislative days and committee days. Most of us are on three major committees as well as having to be on the Senate floor for record votes and debates. I must emphasize that the lack of attendance does not in any way lessen the interest that we have in this committee in the moving forward with the reauthorization of the Clean Water Act amendments that I think are very vital.

I don't want you to feel that you are talking to an empty room, because the staff is here and the Senators will be briefed on what your statements include.

Now, please go ahead, Mr. Rosholt.

STATEMENT OF JOHN A. ROSHOLT

Mr. ROSHOLT. Mr. Chairman, I have submitted a written statement. I would ask that it be included in the record.

Senator SYMMS. Your entire statement will be included.

Mr. ROSHOLT. I will summarize.

I am appearing today on behalf of the National Water Resources Association, which is an organization representing some 18 State agencies.

I have also been asked to appear for the Colorado Water Congress, the Nothern Colorado Water Conservancy District, and the Association of California Water Agencies specifically. NWRA is an organization that includes among its members entities that deliver irrigation water to some 20-plus million acres of land in the West. It also has member cities such as Denver, Dallas, Phoenix, Los Angeles, many public snd private power entities as well as other industrial municipal users. Lest you think this will be only a Westwide problem, I have been authorized to advise the panel that I have permission to endorse or to use their names in endorsement of the American Water Works Association, the National Association of Water Companies, and I am also pleased to note that exhibit C to my statement today contains the position of the U.S. mayors, representing 750 cities in the United States who identify with NPDES problems.

We have some 2.3 million dams in America. Some of the States have, obviously, more than others. Those of us who come from areas where water is scarce can appreciate the seriousness of the problem at hand more. However, it is our general position that while water quality may be altered through movement and flow and circulation in an impoundment, that it is not appropriate, at this time, to impose a permit program that would require the monitoring of some 2.3 million reservoirs to determine which, in fact, may have water quality problems, if any. And, in fact, we feel that

there are mechanisms in place to allow the States to deal with the problems, as Mr. Dunn suggested. I have attached a list of those authorities as I know them as exhibit A to my statement.

Essentially, the recent court decision, we think, directs an allocation of resources to an area that really has not been demonstrated to be a problem. It is our position that while some number of reservoirs may well have water quality problems, they can be dealt with at the State level by regulatory agencies that already have the authority in place.

Essentially, we are here to encourage the committee in support of S. 2280, the Murkowski bill, and I note, Senator, that you are a cosponsor of that bill, and I also note support of our association and our people for a bill we will refer to as the Hart-Gorton bill, S. 2279, recently introduced.

I noted that Senator Hart also signed as a cosponsor for the Murkowski bill. We are pleased with that, and I would suggest to you that the timing of the decision of the court of January 1982 was such that many of the legislatures of the United States were winding down to adjournment. I am pleased to attach to my statement resolutions adopted by the Legislatures of California, Colorado, Hawaii, Idaho, Mississippi, Nebraska, and Wyoming in support of remedial legislation on the NPDES issue.

We feel that the existence of dams and the storage of water therein does not pose any significant environmental problem, but State and local controls are in place to deal with these problems because the problems of dams, if any there be, are site specific. They deal with topography, climate, hydrology. We have, in our country, serious and important environmental objectives to pursue with limited resources.

We think at this point that it is inappropriate to let the court decision stand. We ask this committee and the Congress of the United States to enact legislation to correct the problem.

Thank you very much.

Senator SYMMS. Thank you very much.

I will have a question later, but if the panel would yield for a moment, Senator Murkowski, the author of S. 2280, is here. He wanted to make some additional comments for the record. We now yield to Senator Murkowski.

STATEMENT OF HON. FRANK H. MURKOWSKI, U.S. SENATOR FROM THE STATE OF ALASKA—Continued

Senator MURKOWSKI. I appreciate the accommodation and in hearing the concluding remarks of Mr. Roshold, and I am most appreciative, sir, of your support of S. 2280. As has been mentioned earlier this year, I introduced legislation that addressed the problem created by what I feel is an incorrect interpretation of the Clean Water Act.

As has been stated, the Federal court judge decided that the dams or water impoundments should be regulated as a point source of pollution under the national pollution discharge elimination system program of the Clean Water Act. The intent of the legislation was not to clarify congressional intent, but, rather, to restate what was and has been the correct interpretation of the Clean

Water Act. The current policy of the Environmental Protection Agency is to deal with these water quality conditions resulting from water coming from dams or irrigation works or hydroelectric facilities under the nonpoint source controls under section 208 of the act and through point and nonpoint source controls on upstream pollutant discharges.

This regulatory approach has been followed ever since the Clean Water Act was enacted in 1972. As a matter of fact, no changes in the regulatory program were suggested when the act was authorized, in 1977. The changes that would be required by the court decision will be extremely expensive and not result in any significant or positive benefit to the environment. They are unnecessary in light of the success of the current program and certainly costly, extremely costly to the taxpayer and consumer. The EPA should be allocating its funds to required environmental protection, not needless regulatory efforts.

The court did not tell the EPA whether they must regulate the water quality conditions associated with dam operations. The EPA was already doing this. Rather, the court told the EPA how they must regulate these conditions. Specifically, the court ordered EPA to stop regulating dams through nonpoint source control under section 208 and begin regulating them through point source controls under section 402 of the act.

There are over 2 million dams in the United States, and if EPA is forced to change its regulatory approach, it will cost the Federal Government, consequently, the taxpayers, many millions of dollars. There are not any estimates as to how much this will openly cost, of course, the taxpayers. We do know that the cost to the taxpayers and the consumers of electricity and water and water users would be truly astronomical. The environmental benefits of the change would really be unnoticeable.

These costs are simply not justified in light of the success of the current program or the attitude of the Administration to simplify government regulations and licensing. The purpose of my bill, Senate bill 2280, is to amend the Clean Water Act to clarify that dam operations are to be regulated as in the past under nonpoint source control.

In conclusion, Mr. Chairman, let me say that I hope, of course, you will see the wisdom in the situation and the court will reverse itself. However, at this time, such actions has still not taken place. Therefore, the subcommittee must move forward on language that restates the original congressional intent.

Mr. Chairman, I thank you for the opportunity to address the subcommittee. If you or any other members have any questions, I will be very happy to resolve them.

Senator SYMMS. Thank you very much. The chairman has now returned. Mr. Chairman, we have gone through witness one, Mr. Dunn and witness two, Mr. Rosholt. So now we are ready for No. 3.

Senator CHAFEE. Thank you, Mr. Symms, for taking over while I was delayed. I had to go to a long-scheduled meeting.

Mr. Gibson.

STATEMENT OF JOHN GIBSON

Mr. GIBSON. Mr. Chairman and members of the subcommittee, I am appearing on behalf of the Edison Electric Institute and its 189 member companies. With me is Mr. Gerald Smith, who testified yesterday before this subcommittee on other aspects of the Clean Water Act. Mr. Smith will not present any direct testimony this morning, but will be available if the committee wishes to ask questions on specific dams. My testimony this morning is directed solely to the proposal to amend the Act to clarify that releases of water from dams do not require NPDES permits. We have filed detailed written testimony, and Mr. Pascoe from the Colorado Department of Natural Resources yesterday and Messrs. Dunn and Rosholt this morning covered much of what I intended to say.

Therefore, I will touch only the high spots.

It is, of course, true that the storage of water behind A dam can affect its physical characteristics, but as all of the experts who testified in *National Wildlife Foundation* v. *Gorsuch* said, the adverse effects on water quality are neither prevalent nor major. The National Wildlife Foundation itself admitted in its answer to interrogatories in that litigation that it knew of only nine dams nationwide that actually caused water problems. In short, the evidence to date is that while some dams can cause water quality problems, those problems are relatively rare and are very site specific.

Even where problems occur, they can be controlled effectively by State and other Federal programs. A detailed discussion of the applicable statutes and regulatory programs is set forth in our written testimony at pages 16 through 20.

Senator SYMMS. Excuse me, John. Did you say 9 dams out of 2.3 million?

Mr. GIBSON. That was in the answers to interrogatories in the *National Wildlife Federation* v. *Gorsuch.*

Senator SYMMS. What is the reference for 2.3 million dams?

Mr. GIBSON. I think that figure comes from the Soil Conservation Service of the Department of Agriculture.

Senator SYMMS. It seems like an enormous amount of dams to me.

Mr. GIBSON. It covers all dams of any size, virtually.

Senator SYMMS. There were nine in question out of 2.3 million?

Mr. GIBSON. That is what the National Wildlife Federation came up with in its answers to interrogatories in the litigation.

Senator SYMMS. Thank you.

Mr. GIBSON. Assuming that there were a need for further regulation, the NPDES program, with its emphasis on nationally uniform technology-based standards, is too inflexible. The NPDES program requires the imposition of a particular type of limitation, one based upon a technology designed to achieve preexisting stream conditions as closely as possible, without regard to resource management considerations.

Also, as a practical matter, EPA is ill-equipped to issue the necessary regulations for new and existing dams and, together with the States, to license the 2.3 million dams in the United States or even the 60,000 or so largest dams that are subject to the Corps of Engineers safety survey.

Any real effort to do so would divert EPA's limited resources from important environmental responsibilities, such as setting and enforcing toxic pollutant effluent limitations, for little or no real world environmental benefit.

Thank you, Mr. Chairman. That concludes my testimony.

Thank you, Mr. Gibson.

I was reading what you had to say here, and we will have some questions when we are through.

Mr. Burwell.

STATEMENT OF DAVID G. BURWELL

Mr. BURWELL. Mr. Chairman. My name is David Burwell, and I am the attorney of record in the *National Wildlife Federation* v. *Gorsuch* case. I would also like to direct my testimony exclusively to section 14 which would exempt dams from the point source program. We, of course, urge that section 14 be rejected by this committee. We recognize that dams and the waters they impound can have great benefits to the Nation, not only in power generation, flood control, and navigation, but also in fish and wildlife benefits and even downstream water quality.

However, dams discharges can, and do, kill fish, alter downstream water habitat and reduce the capacity of downstream water to assimilate the discharged pollutants from other sources. As more dams are built to provide for water supply, hydropower, flood control, and other purposes, the severity of this problem will increase. Dam pollution must be addressed, not ignored.

My testimony addresses five basic issues with respect to dam pollution, and I will ask only that the entire statement be submitted into the record and not discuss these items in detail.

Senator CHAFEE. Yes; we will do that.

Mr. BURWELL. They do, however, address the severity of the problem, the number of problem dams, the availability of technology to control the problem, both cost and benefits of control, and the regulatory structure needed to target problem dams while excluding dams which cause no problems or which actually improve water quality.

In my oral remarks, I would like to address the extended amount of misinformation that has been submitted to this committee by EPA and others concerning the lawsuit and its regulatory consequences. What I suggest is that EPA is again trying a variation of the Washington Monument strategy on this committee: Threatening dire consequences through overenforcement of the court's mandate in order to strong-arm Congress in to granting an exemption for dams from the point source program.

We have recently seen the same tactics in the Clean Air Act, where EPA has moved precipitously to cut off highway and sewer funds to States in an attempt to stimulate congressional reaction against the act. The list of misstatements is long. I will address a few: First, the case does not address all pollution discharged from dams. It is only pollution caused by dams. This is why the nonpoint source program won't work. We are not talking about nonpoint source pollution that flows into reservoirs from outside sources. We are talking about pollution that is generated in the reservoir itself

and then discharged downstream. You cannot regulate that pollution by regulating only nonpoint sources.

Second, the case does not address all pollution caused by dams, just that pollution that is caused and then discharged downstream. Downstream erosion, salt water intrusion, and ground water pollution caused by dams but not discharged by the dam is not covered by the case.

Third, despite the limitations on the scope of the court's decision, dam pollution is a significant problem. As you have heard, one of my copanelists said that we could only point to nine dams that cause water pollution problems, citing our response to interrogatories filed in the lawsuit. I have brought that interrogatory and our response to it with me and request that it be included in the record.

The response clearly indicates that the nine instances of dam pollution we cited were examples of categories of dam pollution, not an exhaustive survey. The appendixes to our testimony contain several additional examples of dam pollution, including 14 dams identified by the Tennessee Valley Authority as causing either critical or major water quality problems on the Tennessee River. Also, while I will let Dr. Whitley speak for the State of Missouri, it is our understanding that dam pollution is the No. 1 unaddressed water pollution problem in that State.

Fourth, the court did not hold that EPA would have to issue 2 million permits. General and areawide permits are available, and would be allowed. In this regard, I would like to refer the committee, and I do in my testimony, to the existing program for storm sewer permitting by EPA under the point source program. In 1977, EPA was ordered, in a similar court suit, to regulate the discharges from feed lots and storm sewers. There are over 2 million of such discharges.

However, EPA did not go to Congress and ask for an exemption. Instead, it buckled down, developed a cost efficient program that targeted the problem storm sewers, and issued general permits for the remainder.

We believe that a responsive EPA could undertake a similar program for dam pollution and develop a program that would not require more than 1,000 to 1,500 permits. This is a minor part of their entire NPDES program.

Fifth, EPA has suggested that it will take 9 to 14 years, at a cost of about $300 million per year, to comply with this court order. It has also been suggested that the private costs will be over $6 billion.

Neither the public nor the private costs of regulation represent even a fraction of that amount. Again, on the storm sewer program, EPA regulated and set up that program with virtually no increase in the incremental costs in the NPDES program. As you are well aware EPA has, in fact, this year, requested substantial cuts in its point source program. A restoration of EPA's budget simply to what it was 2 years ago would more than suffice to cover the costs of such a program.

Again, on the question of technology, I have several examples in my testimony.

Senator CHAFEE. Mr. Burwell, unfortunately, your time is up. If you want to conclude or wind up, we would appreciate that. Make a summary.

Mr. BURWELL. I have an example here, Senator, of a technology developed by TVA called a hub baffle. I won't explain how it works. This is the actual size. It is an adjustment that can be put onto the turbine of a hydroelectric generating facility at virtually no cost during maintenance. At TVA it has increased the dissolved oxygen content by three parts per million while reducing the power generating capacity of the turbine less than one-half of 1 percent. My point is simply that the technology is available. It is cheap; the way is there. What EPA now lacks is the will.

Thank you very much.

Senator CHAFEE. Thank you.

Dr. Whitley.

STATEMENT OF JAMES R. WHITLEY

Mr. WHITLEY. Mr. Chairman, I am James Whitley, superintendent of fisheries research for the Missouri Department of Conservation. We are here to oppose any amendment of the Clean Water Act which would exclude discharges from large impoundments from requirements to meet water quality standards. We have experienced all the water quality problems in Missouri which may result from discharges from large impoundments.

We are not concerned with discharges from the many small impoundments in our State. We have an unusually large number, some 400,000 small impoundments. These do not create problems because they have surface water discharges. There are 13 major dams in Missouri which create larger, relatively deep impoundments over 1,000 acres in area.

Discharges from five of these impoundments have caused severe degradation of water quality and costly damaging effects on downstream fisheries. The major violations of water quality standards have been low temperature, low dissolved oxygen, and supersaturation. These problems have been solved at one dam and could be solved at another with proper operations of the power facility.

The largest fish kill ever documented in Missouri was caused by gas bubble disease in 1978 in the upper 60 miles of Lake of the Ozarks. Supersaturation here was caused by discharges into the deep plunge pool at Harry S Truman Dam, the most recently completed large dam in Missouri. There was a second large fish kill in 1979 for the same reason. Alterations to the spillway have reduced supersaturation to the level that will meet the standards, if the facility is correctly operated.

There are many other problems associated with Harry S Truman Dam, and we have had eight fish kills there of substantial proportion since 1978. The latest was in June 1982. A requirement to meet water quality standards below Truman Dam could have resulted in a different design at a lower cost and could have prevented supersaturation. One problem with State control is illustrated by the following. The Corps of Engineers had a very similar spillway and plunge pool at Lower Granite Dam in the Northwest. This dam had created supersaturation problems, yet they built a very

similar one in Missouri which created exactly the same effect. The State did not know of the dam in the Northwest. However, the corps did. So Federal control is necessary.

We anticipate that there may be similar problems with supersaturation below the latest dam being constructed in Missouri, Clarence Cannon Dam. Again, proper operation would be necessary to meet water quality standards.

Low dissolved oxygen problems have occurred in the discharge from Bagnell Dam which forms the Lake of the Ozarks. A fish kill there in 1977 was so large that dead fish were visible for 68 miles in the Osage River, the third largest stream in the State of Missouri. We have been unable to completely obtain relief from the problem of low dissolved oxygen below this dam either through cooperative efforts with the owner of the electric company or through litigation in the courts.

The other remaining problem, a violation of water quality standards resulting from discharge from a dam, is in Lake Taneycomo below Table Rock Dam. This dam was completed in 1958. A trout fishery was developed there and the fishery has become extremely popular. The discharge of oxygen-deficient water from Table Rock has been acute since 1970 and has threatened the fishery.

The Corps of Engineers cooperated with us in a study which they funded, and we determined the socioeconomic value of the trout fishery in Lake Taneycomo and determined the effects of various oxygen levels on the trout fishery. This was a state-of-the-art study. We found that there were 329,000 days of fishing annually at an annual estimated $9.9 million to the local economy. This is roughly equal to the power produced from Table Rock Dam. An estimated 12,600 days of visitation are lost each fall of a typical year at Lake Taneycomo because of low oxygen levels, thus costing the local economy about $358,000 annually. We are confident that the benefits to this very valuable fishery will far outweight the costs if the corps is able to raise the dissolved oxygen levels to meet water quality standards. We used the same methods described above to estimate the value of the warm water fishery in Lake of the Ozarks below Harry S Truman Dam. In 1977, there were 1,860,000 fishing trips on this lake, and this is an annual value to the Lake of the Ozarks regional economy of approximately $40 million.

This far exceeds the annual value of the power capacity of Harry S Truman Dam.

In summary, the impacts of discharges from dams have had very significant adverse effects on downstream fisheries in Missouri. For the past several years, pollution from dams has killed more fish in Missouri than any other source of pollution. This type of damage is totally unnecessary when there are solutions to the problems at relatively low cost considering the benefits. We conclude that discharges from large impoundments, where there are problems, should be required to comply with the water quality standards under the Clean Water Act.

This would not require regulation of all dams since discharges from most of them do not cause water quality degradation. We especially think that permits should be required, Federal permits, for all large dams in the future that are built, to insure that the

proper designs are incorporated and proper operations are required which will result in discharge of high quality water.

Senator CHAFEE. Thank you very much, Mr. Whitley.

Let me quote to you from Judge Green's opinion, and my question is going to be directed to Mr. Dunn and Mr. Rosholt, because this is a troublesome matter.

I might say I started out, as I listened to your testimony this morning, we considered this yesterday when we heard the gentleman from the Edison Institute testify.

Who was that?

Mr. GIBSON. Mr. Smith.

Senator CHAFEE. Mr. Smith.

My reaction was that it seemed like sort of a nuisance to have to have 2.5 million permits issued, but then I read Judge Green's closing part of his opinion which says,

> This decision is made in full cognizance of the enormous numbers of dams in this country, over 2 million, including 50,000 to 60,000 large dams and their importance for many purposes.
>
> Fortunately, as the parties recognize, the granting of this relief will not force EPA to require a permit for every dam in the United States.
>
> Many dams may cause no pollution problems whatsoever. There are administrative options available through EPA such as categorical exemptions, areawide permits and general permits which can minimize the burden on both the agency and dam owners and operators. Those dams that do or may discharge pollutants must be regulated according to law.

Of course, as you know, under 404, we have a very large exemption, categorical exemptions.

What would you suggest, Mr. Rosholt, viewing the problem as outlined by Mr. Whitley and Mr. Burwell—that actually, there is pollution caused by dams? I don't think anybody argues that, and so what are we going to do? How are we going to handle this problem?

Mr. ROSHOLT. Mr. Chairman, in my opinion, and my statement sets this out, I think it is unnecessary to necessitate open-heart surgery when a Band-Aid may cure the problem. The only way you can determine whether 2.3 million dams have a problem is to monitor them.

If you allowed the decision to stand, that is precisely what would have to happen to determine if 9, 15, 50, or 1,500 have problems. It seems to me that that is a commitment of the Nation's recourses to a process that is not necessary when the regulatory authority is in place to deal with these problems on a local basis.

Senator CHAFEE. But what are the regulatory authorities? Take, for example, a dam that is close to a border; as Mr. Whitley said, the kill of fish stretched 68 miles down the river. You have got a dam in Missouri, let's say, that is causing pollution in Arkansas.

Who does what? What is the Rosholt solution?

Mr. ROSHOLT. I am not that familiar with the Missouri problem, although I do recognize that there have been some horror stories from Missouri and a couple of fish kills. But as I would suggest, those are isolated examples.

If there are problems in that regard that cannot be worked out by two adjoining State water quality departments, then maybe we would come back to you to seek a solution to that, but it seems to

me improper to regulate or attempt to monitor so as to regulate 2.3 million dams.

Senator CHAFEE. I think we could come up quite rapidly with regulations that would just automatically exempt, by their very description, a host of 2.2 million of those dams.

My problem is this: I am very sympathetic to the points you made, except what do we do with the ones, whether it is 9 or whether it is 50 or whether it is 150? Who are the polluters?

Mr. GIBSON. May I respond to that, Mr. Chairman?

Senator CHAFEE. Sure. I am looking for guidance.

Mr. GIBSON. I don't know how much guidance I can provide, but I think this is an unusual situation in that the discharges—the problems cannot be neatly categorized depending upon the size of the dam or the location. These things are very site specific, and that is the reason that general permits are not a practical solution to this.

It has been stated here today, and by others, that the general permits could be used to solve this problem.

But in order to issue a general permit, all of the potential permittees to be covered must be similar in size with similar dimensions, but since the problems with respect to dams are very site specific, a general permit containing conditions and requirements for all dams to be covered by the general permit would not be feasible.

Moreover, the States, there are 35 States now that issue NPDES permits, do not have authority, presently, to issue general permits. That would have to be delegated to them, I assume, by revision of NPDES programs. It would have to be approved by EPA.

In the meantime, it would fall on the States and those States issuing permits, and it would put a great burden on EPA trying to sort out, in some reasonable matter, which dams should be required to have permits and which should not.

We have searched our soul to try to come up with some reasonable way to categorize dams, but because the problems—the very few problems we have been able to isolate coming from dams—have no common denominator as far as the size of the dam or its location; that we cannot really come up with a rational program to categorize them;

We doubt if EPA could.

Senator CHAFEE. Let me try it the other way around, then, to Mr. Burwell and Mr. Whitley. It does seem like a massive overkill to have these permits for 2.5 million dams for a handful of offenders.

Why don't we just construct some legislation that would be directed to the problem, which is, you cannot cause pollution, and then forget the permit process. If somebody causes pollution of the fish kill nature outlined by Mr. Whitley, well, then, we will move in on them in some way.

Mr. BURWELL. We have found an answer without too much difficulty. Some categories are suggested in our testimony. For example, low dissolved oxygen is a problem that occurs only at stratified reservoirs, where the dissolved oxygen content at the bottom of the reservoir goes down, sometimes, to zero.

The corps estimates that the reservoirs that are stratified tend to have dams over 40 feet in height and with a total capacity of about at least 1,000 acre-feet.

That is one category right there. You could make a presumption that those reservoirs stratify and have dissolved oxygen problems, and that ones of lesser amount, lesser height, don't.

Another example is just the category of all hydroelectric facilities. There is about 1,500 of such facilities in the country. The hydroelectric facilities are the ones that discharge from the bottom of the dam and cause the problems.

Senator CHAFEE. Is it safe to say that dams which have a spillway, as we traditionally know it—and I don't know the language of the trade, here—but I mean a spillway which is open to the air, are they nonoffenders?

Mr. BURWELL. Most of them are not, because if they have a surface release spillway, the dissolved oxygen content of the water at the top of the reservoir doesn't create a problem. Sometimes they cause supersaturation problems, if it is spilled into a deep basin and the atmospheric gasses get entrained. That is what Dr. Whitley was talking about.

The gas bubbles disease is similar to the bends. It can kill a lot of fish. That is a very site-specific problem. You can identify the types of dams that can cause supersaturation, and when they occur in the Pacific Northwest, they have been addressed very efficiently and at low cost.

We have testimony to the effect that the planned reduction of these spill deflectors who prevent supersaturation would increase the benefits of the salmon industry; it was $146 million by the year 2000.

Senator CHAFEE. Why did this come about? Why were these problems addressed?

Mr. BURWELL. Losses of steelhead trout and salmon were dramatic. From about an 80-percent survival rate in the midsixties to about 5-percent survival rate going tbrough these hydroelectric facilities.

Senator CHAFEE. So that problem was solved not because of any EPA permit, but because of local pressure and the State being concerned?

Mr. BURWELL. That is correct, Mr. Chairman.

Senator CHAFEE. Isn't that really the way to solve these problems?

Mr. BURWELL. If the problem is of this great magnitude and there is an agency as the Bonneville Power Authority that has the facility to do the research and install the technology, sometimes it helps, but supersaturation problems exist in other parts of the State.

Dr. Whitley pointed out they exist in Missouri, where either the funds, the knowledge, or the incentive does not exist. The State isn't involved. The Corps of Engineers has been very reluctant to do anything about their problems. So we do need a requirement.

As I said, if the will is there, the way is there, and all we would request and all this court decision requires is that the will be there.

Senator CHAFEE. Senator Symms.

Senator SYMMS. Thank you, Mr. Chairman.

I would like to ask Ken Dunn to comment on that statement that you made, if you agree with what John Gibson said, that because of the site specificity of most of these programs, can the States take care of this?

Let's just hypothetically say that this court ruling is is overruled so that EPA won't be involved in this; then where are we?

Mr. DUNN. Senator Symms, the States do have the ability to regulate the discharge from these dams and reservoirs. They have the authority or the ability to adopt their own State regulations, and most of them have; they also have the authority under the Clean Water Act; 401 certification gives them some water quality authority.

I think one of the fallacies is thinking of dams in terms of a general term, dam, a generic dam, if you will.

Dams are individual items similar to people and similar to fish and other species of life things.

You cannot categorize a dam and say, "If we do this to all dams, they save all our problems," it won't work. The need for that corrective measure is not necessary in many dams. The problems associated with dissolved oxygen and nitrogen supersaturation is related not just to a size of a dam. You cannot take all sizes. It relates to the age of the dam; the type of facility; the general temperature; the conditions prevalent in the atmosphere.

There are a lot of things that relate to whether a dam is, in fact, creating a problem to downstream fisheries.

Simply, the only way you know that there is a problem is: One, if somebody identifies a fish kill, that is an obvious thing. Anybody that cannot notice that has some severe problems themselves.

But, second, the only other way, absent some strong visual indication, is you have to run tests. If we are going to adequately determine that there is a dissolved oxygen problem, and, in fact, that dam is creating a dissolved oxygen problem, the only way you can find out is you have to run some specific tests on the water coming into the reservoir and the effluent of the water going out of the reservoir and find out what the changes are.

I think, in addition to that, you have to balance what happened in the process of that reservoir storing some water. Siltation, there has been some statements made that siltation is flushed out of dams.

I submit my knowledge is that for the most part, dams retain silt; they do not flush most of the silt through the structure. They retain that silt, and if you run an analysis on the silt, on the material that is held back in a reservoir, I think you will find in most cases, again, that that silt has attached to its phosphates, bacteria, pesticides, all kinds of minerals and items that are deleterious to the water that was in the water when it came down into the reservoir.

All right, now; so now we say a dam may have low dissolved oxygen. That may be true, and it may have been caused by the storage in that dam and the releases through a turbine because there is not adequate aeration. But to condemn that dam and say, "It caused the pollution," and not look in balance to what it might have done in terms of correcting a problem that was coming into

the reservoir, I think, is not serving justice to the people that happen to be operating the system.

Senator SYMMS. Could I pursue that a little further?

In terms of some of these things raised in the court case, you mentioned some of them, supersaturation, and altered water; I think there was some comment about sediment, but then the dissolved metal content, have we had any of those problems in the past in Idaho, and if so, has your department done anything about it?

What have we done about it? I will put it that way.

Mr. DUNN. Yes, Senator. We have had some problems in Idaho. The State of Idaho addressed those problems. Dissolved oxygen in American Falls Reservoir, I think, is one that comes to the mind of most Idahoans.

The State legislature, in fact, set the limit, a lower limit for releases of dissolved oxygen from American Falls Reservoir. It requires that the Idaho Power Co., which is the operating entity of the powerplant there, that any time dissolved oxygen reaches or approaches a certain point, that they, in fact, have to inject oxygen into the water to solve the low dissolved oxygen problem there.

Senator SYMMS. In other words, back to the chairman's question, are you saying that, in fact, we did do something about what was perceived to be or what was, in fact, a real environmental problem?

Mr. DUNN. That is absolutely correct.

Mr. Chairman, the display that the gentleman showed you which was used by TVA to inject air into water, Idaho Power Co. routinely uses that system in their large dams, and, in fact, they go a step better than that: They inject a water air flurry so that they can get more oxygen actually injected, more dissolved oxygen into the water system. It is a refinement on just allowing the suction and draft to inject dissolved oxygen.

Once the problem is identified, my experience has been a solution is found for it. Supersaturation on the Snake River Dams and Columbia River System were solved once it was pointed out. But when you build a large engineering structure and anticipate the problems that you are going to have, you are going to overlook them. It is human, and it is something that will occur. But as soon as they are identified, there are existing methods of solving that problem, if there is a will.

In the State of Missouri, if there is no will to do it and on the State of Missouri or one other State or a very small number of States won't help themselves, it doesn't seem to me that that makes it a Federal problem in which the U.S. Government has to get in and try to tell all the rest of the States that this is the way you are going to operate the system.

It seems to me there ought to be pressure put on the States to solve the problem.

Senator CHAFEE. Senator Symms, I have to go, but I would appreciate it if you would go on as you wish and recess the committee.

I want to ask Mr. Whitley, not to defend Missouri, but what do you say to this? Your testimony says that you want the act continued as is, yet the problems that you have confronted on the Harry S Truman Dam, it appears that you are solving them absent EPA control over dam pollution prior to January of this year.

Mr. WHITLEY. Part of our problems have been solved, but only if they operate those in the right manner, and we have no assurance that that will happen.

I would like to comment on this question of so many dams. Missouri has an unusually large number, some 400,000. We have studied the water quality of streams all over the State. We can tell you with assurance that most of those are no problem at all, and they can be excluded without question.

We are talking about the problem ones. We know what they are now. We don't have to go out in a month and do all this work. We have 5 in the State, of the 13 large ones, that have created problems. Problems have been solved at one entirely by a very simple method, by changing the water level discharge.

Another one will be solved if they operate it correctly. At Truman, it has been partially solved. Our attorney general has filed two lawsuits involving Truman Dam and Bagnell Dam—those were both unsuccessful—and a lawsuit involving Stockman Dam, which was unsuccessful.

The State has made a tremendous effort. We have worked from 1970 until now on the Table Rock Dam, and the problem there is still not solved.

Senator CHAFEE. The Harry S. Truman must be a Federal dam, isn't it? What does the State of Missouri do? You don't have any control over what happened to that dam.

Mr. WHITLEY. No; we don't.

Senator SYMMS. I will have the lawyers check, but the American Falls Dam was a Bureau of Reclamation dam.

Mr. ROSHOLT. I believe the process the Bureau of Reclamation followed in securing authorization for construction of that dam was they needed the State certification of 401.

Senator CHAFEE. But you get the certification, and that is fine. For instance, somebody said one of the laws on the books is 404. Section 404 only controls up to building it, but now we are talking about operating the dam.

What can you do with a Bureau of Reclamation dam? What can the State of Idaho do?

Mr. ROSHOLT. In that particular instance, it was the conversion of an irrigation reservoir to an irrigation reservoir with a powerplant.

The Federal Energy Regulatory Commission identified a problem with releases through the powerplant as opposed to the low level releases through the spillway.

The water coming out of your irrigation reservoirs enhances the oxygen level, and it falls below.

If you run it through a penstock it is the same as before it passes through. In order to deal with it, you have to deal with the license given to the power company to operate, and it was suggested the operator had to meet the State water quality standard for all releases from the dams for those purposes.

It is no problem in a new structure.

Senator CHAFEE. In the new structure, now we are aware of the problem.

Mr. WHITLEY. Harry S Truman is our newest structure. That has been our largest problem so far. It was started before the certification 404 was on tbe books.

Senator SYMMS. Let me ask you this, Mr. Whitley.

If you had had this system, if something isn't done about it legislatively, if the court ruling stands and you are going to use some kind of an EPA permit system, would you think that those people that didn't want the Harry S Truman Dam built would be able to use this as one more roadblock to throw in the way of the progress?

Mr. WHITLEY. I don't really know what they might have done, but I do believe that since there was a dam with a spillway and a plunge basin almost identical in the Northwest that had caused problems; if there had been a Federal permit, or review process of some sort, they would have found out about the problem and prevented it in Missouri. We in Missouri didn't know anything about those problems in the Northwest. I think a Federal review or permit system would have prevented the problem at much less expense to the taxpayer.

Senator SYMMS. Do you think that will be the overall impact? We have a lot of environmental problems in tiie country. It is obvious that there are a few dams that are causing some problems.

Out of 2.3 million, there are a few that everyone admits have a problem. Overall, if we divert our limited resources from EPA into this kind of a problem, what do we do then, just turn our back on the sulfur dioxide side that is belching out of the smokestacks or the people that are out dumping insecticides?

Do we just turn our back on that? We cannot go out and monitor everything.

Mr. WHITLEY. I am only suggesting that we divert our experts in Missouri to five dams.

Senator CHAFEE. Why can't the State of Missouri do it?

Mr. WHITLEY. We have tried that and haven't been successful.

Mr. BURWELL. Can I testify on that? The problem applies to a limited number of dams. When they occur, it is very significant. If EPA, which is now cutting its NPPES program, would only maintain its existing program and try to set up a program like the program it has for storm sewers, we think it can be done very efficiently and very cheaply.

It really shouldn't be a question of money. The attachment of this hub baffle cost almost nothing. It can be done during normal maintenance. It increases the oxygen content substantial.

In the additional material we have——

Senator CHAFEE. Mr. Burwell, I have to interrupt you. There is a vote on. I have another engagement, anyway. I want to thank you gentlemen for coming. You have confronted us with a knotty problem.

I think everybody here at the table and at this podium agrees that we want to find a solution to the pollution and the damage that is caused. How we go about it will be a challenge for us.

Mr. BURWELL. Mr. Chairman, could I add one letter to the record?

Senator CHAFEE. Sure.

Mr. BURWELL. It is on American Falls Dam. It states that the response of the State of Idaho in 1974 to the problem to American

Falls Dam was to lower their water quality standard of dissolved oxygen. The response to that problem was not to address the problem exclusively.

They did adopt an oxygen injection control program, but they did have to lower the water quality standard of that dam.

Senator CHAFEE. That ought to get a rise out of Mr. Dunn.

Mr. DUNN. May I submit a response to the record at a later date for you?

Senator CHAFEE. You surely may.

Mr. DUNN. I can answer that.

Senator CHAFEE. Senator Symms will wind up the meeting.

Thank you all.

Senator SYMMS [presiding]. Thank you, Mr. Chairman.

Go ahead, Ken.

Mr. DUNN. Mr. Chairman, the State of Idaho lowered the standards on the dissolved oxygen from six parts per million to five parts per million. The reason they did that was because——

Senator SYMMS. First of all, it doesn't start bothering the fish until it gets down below three, right?

Mr. DUNN. That is right. One of the reasons it was lowered it was because of the studies done by the fisheries and the State department of agriculture.

Five parts per million did not kill fish. Certainly going from six to five puts some stress on the fish. Going from six to five would put some stress on the fish. It does not mean they cannot survive in that environment. It means there will be some stress.

The reason, in addition to the fact that it did not cause some substantially environmental damage, was that to maintain the six parts per million after American Falls had been rebuilt and the problems of low storage during the prior years, when the reservoir then was filled up, there was a substantial amount of vegetation that was inundated and had to decay and that robbed oxygen from the system.

That is what created the problem in that first couple of years in trying to maintain dissolved oxygen. OK, the power company, which is the operator of the powerplant, could have maintained the six.

The way they would have had to have done it was by injecting liquid oxygen. The cost of the installation of that facility and the operating costs of the liquid oxygen, as I remember the numbers, was something like $2 million a year.

The benefits were essentially nothing. So it was the judgment of the Idaho Legislature and most of the agencies of the State that the benefits did not justify the cost, and so the dissolved oxygen was lowered to five.

There are some operating criteria to make sure that it just cannot go below five, because once it approaches that, water is spilled out the way it was prior to when the dam was operating.

There was a rational reason for lowering that.

Senator SYMMS. I am going to have to leave in a second. I wanted to ask Mr. Gibson, how significant is one-half of 1 percent in the efficiency of a hydro project, those little one-half of 1 percent; Mr. Dunn said Idaho Power Co. does much more than that.

Mr. GIBSON. It depends on how large the generating unit is. One-half of 1 percent of a large generating unit could be a significant amount of power production over a period of time.

Senator SYMMS. There is an environmental tradeoff there. You have to build another dam or something?

Mr. GIBSON. Yes. We don't have the kind of reserves we used to have. If I could make one comment, I think this is illustrative of the fallacy that these dams are subject to categorization and we can cut through this knotty problem by categorization.

Mr. Burwell suggested that one appropriate category would be all hydroelectric dams. I think he quoted a figure of 1,500 dams. I don't know whether that is correct or not. Pacific Gas & Electric Co. has a number of hydroelectric dams, 64 hydro projects, most of which because there is short residence time for the water in the reservoir and at high altitudes don't have thermal stratification, so there is no low oxygen, low DO, problem.

It would be inappropriate to include those kinds of dams. I think they are prevalent in Colorado and high-altitude States in the West, in this neat categorization. This is simply illustrative of the fact that you just cannot categorize dams because they are hydro-dams or some other kind of dams or they are located in one particular geographic area.

It is impossible. Each dam has to be looked at individually to determine whether it has got a pollution potential problem, and it would be nice if that were the way out, but it isn't the way out in trying to categorize dams.

I think Judge Green made an erroneous conclusion that this is an easy way for EPA to categorize sources.

Senator SYMMS. Thank you, very much.

You are all very excellent witnesses. I am sorry to hurry off, but if I don't, I will miss the vote.

[Whereupon, at 1:05 p.m., the subcommittee recessed, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bill S. 777 follow:]

A STATEMENT OF SCIENTISTS CONCERNED ABOUT THE PROTECTION OF WETLANDS

We have formed an ad hoc committee for the protection of wetlands because of our concern that Federal protection of wetlands might be diminished through weakening of Section 404 of the Clean Water Act. We believe that such an unfortunate event will not occur if the Congress is apprised of the many values of wetlands and of the effectiveness demonstrated by the Section 404 program in protecting wetlands. This statement summarizes such information.

We respectfully urge the Congress to reauthorize Clean Water Act appropriations for a period of several years, approving no amendments to Section 404 unless they would strengthen protection for wetlands. We also respectfully urge the Congress to appropriate sufficient funds each year to maintain powerful roles in the Section 404 program for the Fish and Wildlife Service and the National Marine Fisheries Service, which have served as the guardians of wetland resources.

What are Wetlands?

"Wetlands" are found in many different kinds of ecosystems, such as saltwater and freshwater marshes, swamps, bogs, hardwood forests on bottomland adjacent to rivers and streams, some evergreen forests, wet meadows, and arctic tundra. Wetlands are characterized by soil that is permanently or periodically saturated with water and by communities of plants and animals that are adapted to life where the ground is saturated. Many different wetlands are interconnected, depending on each other for their continued existence. Most wetlands are not immediately adjacent to traditionally defined navigable water, but are no less important than those which are.

Wetland Values

The nation's wetlands are critical to the survival of fish and wildlife, the maintenance of water quality, ground water recharge, and flood control.

fish and wildlife

Conservatively, wetlands support a $12 billion per year commercial and recreational fishing industry. In Alaska, 24,000 people -- some 25 percent of the work force -- are employed in the salmon industry and their livelihood depends

upon the preservation of pristine streams and wetlands where salmon breed. On the Atlantic and Gulf Coasts, species dependent on wetlands make-up two-thirds of the cash value of all fisheries.

Sixty to seventy percent of the 10 to 12 million waterfowl in the lower 48 states reproduce in the "prairie potholes" of the Midwest and millions of ducks winter in the bottomland hardwoods of the South Central States. Naturalists and sportsmen value these and many non-game animal and plant species dependent on the same wetland habitat.

water quality

Wetlands serve as natural pollution treatment plants. Cattail marshes are used to clean wastewater at 96 treatment facilities in Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. The town of Wildwood, Florida (pop. 2,500) has treated its sewage in a 500 acre cypress-gum swamp for the last 19 years. Wetlands also serve as natural filters for removal of suspended sediments, removing silt that otherwise would degrade reservoirs, rivers and harbors.

ground water recharge

Wetlands are natural sponges and hold water long enough for recharge into the ground. For example, a five square mile bog near Milwaukee, Wisconsin, is key to groundwater recharge in a 165 square mile area. Well water recharged in one year from

each wetland acre in Massachusetts has been calculated to save $6,044 over the least expensive alternate source.

flood control

Because they hold water like sponges, wetlands prolong and moderate runoff after heavy precipitation or snow melt. Wetlands in Minnesota and North Dakota reportedly have significantly reduced flooding in the cities of Grand Forks and Crookston. In Wisconsin, flood levels are 80 percent lower in watersheds with wetlands and lakes than where these features do not occur. In the Boston area, 8,422 acres of wetlands near the Charles River prevent an estimated $3,193,000 in flood damages each year.

Loss of Wetlands

Despite their enormous value, about half of the original 150 million acres of wetlands in the lower 48 states have been destroyed and about 330,000 acres are now lost each year.

Some 80 percent of the tens of millions of acres of bottomland hardwoods in the lower Mississippi have been destroyed. Over 70 percent of all wetlands next to rivers and streams are now gone. Over one-half of the prairie potholes have been lost. California and Connecticut have less than 20 percent of their original wetlands; Missouri has 10 percent,

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and in Iowa only one percent remains. More than 600,000 acres of wetlands have been lost in Texas coastal estuaries -- most covered by spoil dredged from waterways. Each year, coastal Louisiana loses 30,000 acres to open water because of canals built for navigation, drainage or oil and gas operations. These are just a few examples of wetlands destruction.

Protection of Wetlands Under the Clean Water Act

section 404

When the Congress passed the Clean Water Act in 1972, it included a powerful tool for wetlands protection. This tool, Section 404 of the Act, directs the Army Corps of Engineers to regulate the discharge of dredged or fill material into the nation's waters, including wetlands. The Corps is required to follow environmental guidelines set by the Environmental Protection Agency. Permit applications are reviewed for impact on wetlands by the Environmental Protection Agency, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. If any of these natural resource agencies objects to a permit, "memoranda of agreement" negotiated with the Corps provide for elevation of the decision to appointed officials in Washington.

scope

Section 404 applies to all "waters of the United States,"

which have been defined to include not only water courses used for navigation but also tributaries of these waters, waters connecting different states, waters which if degraded could affect interstate commerce, and wetlands adjacent to all of these.

This broad scope of section 404, mandated by Congress and the courts, translates into protection of some 148 million acres of wetlands, only 22 million acres of which are associated with actual navigation. These other 126 million acres include diverse ecosystems of enormous value.

permits

At present, about 9,700 applications for Section 404 permits are processed each year. Some 7,000 of these -- 72 percent -- are for discharges in navigable waterways and their adjacent 22 million acres of wetlands.

Many activities are permitted under Section 404. Normal farming, ranching, forestry, and other activities are exempted by the statute. Furthermore, "general permits" authorize hundreds of activities. Such "permits" are really authorizations issued publicly, by regulation or otherwise, that allow anyone to discharge material under specific conditions without first obtaining an individual permit from the Corps of Engineers. General permits can apply locally, regionally or nationwide. Section 404 requires that authorized

activities be similar, have only minimal adverse environmental impact, and minimal cumulative adverse effect. The Corps estimates that general permits obviate the need to process 60,000 individual permits.

Of the 9,700 individual permit applications processed, 49 percent are approved without modifications, 33 percent are approved with modifications, 16 percent are withdrawn and 2 percent are denied.

wetlands protected

The Army Corp of Engineers estimates that the Section 404 program has cut wetland destruction in half from a projected 660,000 acres per year in the lower 48 states to the current 330,000 acres. Section 404 is effectively protecting many wetlands while also authorizing extensive development in them.

cost of protection

On average, the cost of compliance with Section 404 is less than one percent of total project value. Costs can be divided into those associated with delay, opportunity lost, and administrative processing. Delay costs average 0.7 percent of project value, opportunity costs are 0.2 percent, and administrative costs are 0.04 percent. Delay costs, and not the costs of modifying projects to minimize environmental impacts, are most of the burden on applicants, and the overall burden is slight. Because most applications are for permits to

discharge in the wetlands associated with navigation, the cost of compliance in other wetland areas is even less significant.

CONCLUSION

Wetlands are critical to the survival of fish and wildlife, the maintenance of water quality, ground water recharge, and flood control. Despite their enormous value, about one-half of the original 150 million acres of wetlands in the lower 48 states have been destroyed, and about 333,000 more acres are now lost each year. This rate of loss might be twice as great without the Section 404 program. Besides protecting wetlands effectively, the Section 404 program is economical -- adding less than one percent to the cost of projects on average.

STATEMENT OF

DR. I. M. RICE

EXECUTIVE VICE PRESIDENT, TRINITY IMPROVEMENT ASSOCIATION

TO THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

WASHINGTON, D.C.

JULY 29, 1982

Mr. Chairman and Members of the Committee:

My name is I. M. Rice, of Irving, Texas, and I am speaking on behalf of the Texas Water Conservation Association. This is a statewide organization composed of individuals, firms, corporations, water districts and authorities, associations, public and private agencies, and groups. It is dedicated to the task of conserving, developing, protecting and utilizing the water resources of Texas for all beneficial purposes.

I am most grateful for the opportunity to appear before you recommending amendment of the Clean Water Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters. At a time when all levels of government, business and private citizens are beset with financial problems, unnecessary and non-remunerative financial burdens should be reduced and eliminated entirely where possible.

In support of this recommendation, I will cite examples where the requirement to obtain a Section 404 has resulted in needless costs without commensurate benefits. Moreover, opponents of projects have made use of the Section 404 permit process for their own purposes in attempts to prevent projects from being undertaken. I will also deal with the commendable efforts made recently by the Executive Branch to reform and reduce the costs of the Section 404 permit process and to give my views as to why these efforts do not and cannot solve the problem. The administration has submitted legislation to amend the Clean Water Act, and this has been introduced by request by leaders of the full Committee on Public Works. While this bill provides needed reforms, it does not address the Section 404 problems I will describe. I would like also to present views on the problem of continuing protection of the wetlands and finish by summarizing reasons for advocating support of S.777 by the distinguished members of this committee.

THE REQUIREMENT TO OBTAIN SECTION 404 PERMITS HAS IMPACTED ADVERSELY ON LOCAL GOVERNMENTS, BUSINESSES AND INDIVIDUALS. This is reflected in delays to projects and the attendant escalations in prices due to inordinate periods of time consumed in permit processing, in resolving uncertainties and in bargaining with project opponents who hold projects hostage to force the proponents to accede to their demands or else pay the price of continued delay.

In the category of water supply reservoir projects, I will cite 5 examples, each of which illustrates these concerns.

RICHLAND CREEK RESERVOIR near Corsicana, Texas, is being built by the Tarrant County Water District to serve residents of the western part of the Dallas/Fort Worth Metroplex. No federal funds are involved. Richland Creek is a non-navigable tributary of the Trinity River. It is sometimes dry, othertimes a raging torrent. Issuance of the Section 404 permit took 930 days. A principal issue causing the delay was a demand for mitigation: for alleged effects on wildlife habitat; protection of Indian camp and gravesites; and preservation of examples of early Texan architecture, (actually farm buildings constructed between the 1850's and the 1930's). A continuous flow of water in Richland Creek below the dam was also sought. Initially, the US Fish and Wildlife Service demanded the purchase of up to 20,000 acres of land for wildlife habitat losses. This is almost half the amount needed for this 44,700 surface acre lake. An archeological survey costing $520,000 was demanded and supplied. As Indians lived all over this part of Texas, evidence of camps and burials was found in the project site. Of 274 Texan building sites within the project, 69 were claimed to be of significance, including what are referred to as log, dog-trot, cumberland, double pen and shot gun houses or cabins.

The Tarrant County Water District had sold $342 million in revenue bonds which had to cover not only the reservoir costs, but the 73 miles of 90 inch and 102 inch pipeline and pumping stations needed to transport the water to its place of use. Alarmed by the escalation which every month of delay added to the cost, the District felt it advisable to pay most of the mitigation costs but which the district felt were otherwise unjustified. To continue to fight might have eventually resulted in having to go back for another bond issue, not a very agreeable prospect in today's bond market.

The price finally settled on was $1,750,000 for archeological mitigation and 13,000 acres of land for wildlife habitat costing $8,125,000. The total impact of Section 404 requirements was $10,536,000, about 4% of the project costs. This figure does not include any indirect cost increases resulting from construction cost and land value escalation while awaiting the Section 404 permit. Navarro County, in which the project is located, also loses an additional 13,000 acres from its tax rolls without expectation of recoupment, such as will result from increased advalorem taxes from shoreline development and fees from recreation facilities around the lake itself.

LIMESTONE LAKE was constructed by the Brazos River Authority on the Navasoto, an intermittent stream emptying into the Brazos River. No federal funds were involved in this project, the purpose of which is to supply water for thermal generation of electric power from lignite, so as to convert electricity generation from use of dwindling reserves of natural gas. A total of 921 days were required to obtain this permit. A complete history of the problems in obtaining a Section 404 permit has been submitted to this committee by the Brazos River Authority. Suffice it to say that the principal issue again was mitigation for alleged damage to wildlife habitat. The initial demand was for 15,800 acres, valued at $10 to $15 million. Since the

Brazos River Authority had neither the money to buy nor the authority to condemn lands sought for mitigation, they resisted strongly, as reflected in the 921 days it took to obtain the permit. The final outcome of the negotiations was the placing in escrow of $500,000 of Brazos River Authority funds, pending finding a willing seller of land considered suitable for wildlife habitat.

CHOKE CANYON RESERVOIR on the Frio River, a non-navigable tributary of the Nueces River, was built by the Bureau of Reclamation to supply water to the City of Corpus Christi and the Nueces River Authority. 70% of the costs of this $100 million project are to be paid by the local sponsors. This project is an example of federal actions duplicating a State of Texas regulatory process and arriving at substantially the same result. Where the state process consumed 120 days, the federal Section 404 process required 602 days. Both the state permit and the federal permit imposed essentially the same conditions. Both permits were applied for at the same time; the state permit on July 19, 1976, and the Section 404 permit on July 20, 1976. The state permit was issued on November 16, 1976. The Section 404 permit was not issued until March 14, 1978.

The real issue which held up the Section 404 permit was the Endangered Species Act, not the Clean Water Act. The Corps of Engineers placed the permit in a "hold" status until questions raised by the Fish and Wildlife Service could be resolved. The "ransom" list included:

-Purchase of 8,854 acres of land for wildlife mitigation.

-An annual supply of 151,000 acre feet of water to come from reservoir spills and return flows, with any deficit to be made up by fresh water releases from Choke Canyon storage.

-Two or more diversion channels to be dredged between the Nueces River and the delta marshes to make the delivery of their water supply more effective.

-Delay in permit issuance while a 27 month survey of the Nueces Bay system was undertaken by the Fish and Wildlife Service.

Of these demands, the only significant one which prevailed in the Section 404 permit was the requirement for the reservoir releases, a requirement already contained in the state permit. During the delay between issuance of the state permit and the Section 404 permit, costs increased $11,057,000 which amounted to 13% of the total project costs. This expense strongly argues for the federal government to recognize and accept state regulatory control.

BARDWELL RESERVOIR on Waxahachie Creek, an intermittent and certainly non-navigable stream, was constructed by the Corps of Engineers. Ellis County Water District and the City of Ennis pay the water supply portion of the costs. When Ellis County Water District undertook to withdraw from the lake, the water it had purchased, they were told by the Corps that a Section 404 permit was not required for the planned pump station as the work would be covered by a general permit. There were, however, a few requirements before the project could be authorized. One of these was to take sediment samples from the bottom of the lake where the intake was to go and to perform laboratory tests for 16 possible contaminants. What the water district proposed to do in construction of its project was move some bottom deposits a few yards and redeposit them. The fact that another city had been using water for over 10 years taken out of the reservoir over the same bottom deposits with no ill effects and meeting drinking water standards was apparently not considered persuasive evidence. The result was over $10,000 expended to acquire some information of little relevance before being allowed to go ahead with the project.

THE CITY OF KERRVILLE needed additional water supplies to meet needs of a growing population in this popular resort city in the hill country of Texas. The Upper Guadalupe River Authority undertook to supply this need by obtaining a state permit to construct a small channel impoundment of 840 acre feet capacity, holding a two month supply for the city, and to withdraw up to 9 cfs from the Guadalupe River. Kerrville is some 400 miles above the head of navigation on the Guadalupe. A Section 404 permit was required. The Fish and Wildlife Service demanded continuous releases of water be maintained to protect the fish habitat. Originally, the demand was for more releases than the 840 acre feet reservoir could possibly maintain. A second reservoir would have to be built to provide the volume of continuous releases demanded.

After much negotiation, a Section 404 permit condition of variable monthly releases from the 840 acre feet reservoir was agreed on. For normal rainfall conditions, the volume to be released equals the expected flow in the river each month, less the 9 cfs allocated to Kerrville. Under drought conditions, the volume of release is reduced to 4.3 cfs, which is the same as the total amount of prior downstream appropriations, water rights which must be respected under the state permit. The end result was a release program under the Section 404 permit which was essentially the same as that previously granted by the state permit. The Section 404 requirement was spelled out in more detail and expressed in different terms but from the reservoir manager's standpoint, the actions required of him were the same. The problem was that during the additional 10 months delay incurred in the Section 404 negotiations, the project cost rose from an estimated $4,750,000 to $6,852,000. The river authority feels that 60% of this increase, or $1,261,000, was attributable to the Section 404 delay. Kerrville has a population of just over 14,000 people so the expense was $90 per man, woman and child residing in the city.

PIPELINES AND SEWERS.

Next, I would like to touch briefly on an aspect of the Section 404 permit process which affects municipalities, using the City of Dallas as an example. Dallas is a homerule city with a council that is zealous in protecting quality of life within its jurisdiction. Yet to install a sanitary sewer in the bed of a stream within the city limits that is bone dry 80% of the time, the city must obtain federal approval. Preparation of the typical application, I am told, requires 80 man hours which translates into $1,304 of city costs, not to mention the federal costs. Sometimes, public hearings are required, resulting in further costs. The city has its own planning and public hearing processes which it will follow in any case before undertaking a project such as a sewer line. In this instance, the Section 404 permit requirement is wasteful, non-productive and duplicatory and has nothing to do with navigation and, so far as my experience extends, nothing to do with wetlands.

INDUSTRY AND AGRICULTURE.

SOUTHERN SEAFOOD operates a scallop processing plant near Cape Canaveral, Florida, furnishing employment to 400 people and paying taxes in excess of $3 million annually. By means of an innovative processing system, sale of scallops from this facility can compete on the world market, helping our balance of trade problem. But for the problems which Section 404, this facility could be enlarged, increasing benefits to the local and national economy.

A byproduct of Southern Seafood's process is up to 4 million pounds of broken scallop shells per week. The company disposes of the crushed shell in a sanitary landfill on a 37 acre tract of land on Merritt Island. Operation of the landfill complies

fully with requirements of the Florida Department of Environmental Regulation.

In 1980, the Corps notified Southern Seafood of the necessity to obtain a Section 404 permit, as portions of the site were considered wetlands. This decision was based on the finding of some varieties of wild plants that can tolerate saturated soil conditions. Mentioned as observed at the site were sea purslane, leather fern and sea daisy, common plants in much of Florida. The company applied for a Section 404 permit but was informally advised it would be denied. In March 1981, the owner was ordered to cease and desist the landfill operation on Merritt Island. Appeals for relief from this order to federal district and appeals court have estopped the government from shutting down the plant. Both the owners and the government has incurred heavy expenses in this action. The government's contention of authority rests on a previous court decision broadening the scope of Section 404 to include wetlands. What does or does not constitute a wetland is ill defined and ultimantly rests on their judgement of a plants expert. As we all know, experts differ in their judgements. Some of the Corps Districts publish lists of plants whose presence they believe are indicative that a wetland exists. Since some of the plants can also exist in soils that are not saturated, other districts do not publish such lists but rely on case-by-case determinations by staff biologists. This is a case where an agency, determined to preserve all territory that it considers to be a wetland, has met head-on with an entrepreneur who feels that his rights and that of his employees are being violated by government bureacrats. At stake are 400 jobs and $40 million gross sales annually. The issue is too important to rest on a rather wide interpretation by a federal court of an obscure point in the law, further magnified by what might be called very imaginative regulations and value judgements.

HARTS BLUFF RANCH, TITUS AND RED RIVER COUNTIES, TEXAS

The owner, Mr. Eddie Blackmon, undertook to clear and level some forested lands adjacent to the Sulfur River, a non-navigable stream in Southeast Texas. After the work was underway, jurisdiction was asserted by the Corps on the basis that some of the work area was categorized as wetlands. Work by the owner included clearing trees and other vegetation from the area defined by the Corps, as wetlands, filling in low spots and leveling the land, construction of irrigation facilities to support rice production, construction of a small reservoir alongside a channelized portion of the Sulfur River and construction of access roads. Upon notification by the Corps that he was in violation of federal regulations, the owner applied for an after-the-fact Section 404 permit. In order to obtain the permit, the owner was required to restore 830 acres out of some 3,100 acres which had been cleared. He was ordered to replant 625 acres with 50 trees per acre, 85% of which must survive after three growing seasons.

The issue here is that under the present law, a property owner is restricted in his usage of his land if, in the opinion of a federal regulatory agency, it falls in the category of wetlands. This seems to be a taking without compensation. There is further the question of public interest, whether it is better to maintain a 625 acre wooded plot on prime farm land or to put the same 625 acre plot under cultivation. The effect on water quality or navigation in the Sulfur River would not be significantly different which ever direction is followed. A federal agency other than the Corps might have made a different decision as indicated in the next example.

CORPUS CHRISTI SHIP CHANNEL.

The federal government has a project to improve the ship channel into the port of Corpus Christi. A problem is the disposal of the material dredged in the process. Environmentalists objected to disposal in the Gulf of Mexico or on wetlands. The

Corps then proposed to purchase some 2,000 acres of land that was not classified as wet land, build a dike around it and pump the dredged material into the pond so created. However, the site chosen was farmland, as is much of the non-developed non-wetland within a reasonable distance of Corpus Christi. The soil conservationists were adamantly opposed to taking 2,000 acres of prime farm land out of production to use as a disposal site for mud and sand, simply because disposal in the Gulf or on marshy land was in conflict with other views. The project is being deferred until non-objectionable disposal areas are found.

GENERAL PUBLIC.

The interests of the general public and local governments are impacted to their cost and detriment by the application of Section 404.

Large tracts of land are bought with public money allocated for water resources projects and removed from the tax rolls, under the justification of mitigation of effects on wildlife habitat. The taking of land for direct project purposes is compensated for in terms of local revenues, by the much higher assessed value of lake shore homes as compared to agricultural lands. Lake oriented businesses also contribute to tax revenues. Land acquired for mitigation and turned over to the state or federal wildlife agencies not only reduces tax income, but this land no longer is available for entreprenueral opportunities in the future. County governments faced with problems of maintaining public safety, public health, road and fire protection, to cite a few of their responsibilities, can ill afford more tax exempt lands within their jurisdiction.

When a project is delayed while awaiting issuance of a Section 404 permit, and delays of two and three years have been cited, it is the ratepayers and taxpayers who most provide the additional money required because of cost escalation or because of additional requirements such as mitigation. I have no doubt that, if the issue of providing $10 million additional at Richland Creek Reservoir or $10-15 million at Limestone Lake for wildlife habitat mitigation were to be put before the voters, it would be soundly defeated.

Situations can also be cited of owners of private property along the shores of non-federally owned lakes or on the seashore having to obtain federal permits to undertake small construction projects that were entirely acceptable to the local government agency having jurisdiction over the lake or seashore. Examples involve permits which range from placing 5 cubic yards of concrete for a boat ramp, to placing 6 cubic yards of fill for house construction, to placing 8 inch timbers in holes for a boatdock, in which 0.05 cubic yards of concrete was to be added.

THE EXECUTIVE BRANCH HAS UNDERTAKEN MEASURES TO REDUCE THE BURDEN OF SECTION 404. WILL NOT THESE MEASURES SUFFICE?

CORPS OF ENGINEERS GENERAL PERMITS.

The Corps has for sometime authorized exemptions of some categories of work by nationwide use of what are called "general permits." In theory, individual consideration of projects falling within the terms of such a general permit would not be required. These exemptions include: bank stabilization (not to exceed 500 feet in length and one cubic yard of discharge per running foot of length); minor road crossings (less than 200 cubic yards of fill); maintenance of existing structures; instances where discharges are not near public water supplies, shellfish beds, or endangered species; when no toxic materials are involved; and when not involving wild or scenic rivers.

Individual districts implement these policies by issuing the general permits. The Fort Worth District has issued general permits allowing up to 5 cubic yards of fill in water or wetlands for burying pipes or cables; minor road construction; underwater fish attractors; up to 1,350 cubic yards of fill to be discharged below the high water mark in construction of a boat ramp; discharge of up to 30 cubic yards below high water mark in construction of a boat dock or fishing pier; and oil and gas platforms less than 5 acres in extent. As noted previously, even where a general permit is authorized, special conditions such as submittal of plans and sampling of bottom sediments may be imposed.

Very recently, new guidelines on general permits have been issued, referred to as the September 1980 draft. It is understood that futher extension of the general permits will be authorized in another draft to be circulated for public review this fall.

A Corps official gave me his personal estimate that general permits covered 80% of the cases which could possibly fall under the purview of Section 404. Why does not this general permit process alleviate the objections to Section 404? For the reasons:

-General permits are issued by District Engineers under the guidance of the Chief of Engineers. The guidance can be changed and the permits can be changed by appointed officials at their discretion. A change in the administration can wipe out any or all of the general permits.

-Terms of permits can be changed by courts. Currently, a federal district judge reviews all Section 404 permits in a nearly 200 mile segment of the Trinity River in Texas as result of a NEPA suit filed 11 years ago.

-The fact that so many general permits have been and will be issued seems to me prima facie evidence that we have an unclear law. When up to 80% of the cases which are theorectically covered by a law can be exempted administratively, or, that exemption also can be administratively withheld, such a law warrants clarification by the legislative branch.

It may be well to mention the significant costs of administering the Section 404 permit program. In 1981, the Corps processed a total of 18,104 applications involving either Section 10 of the 1899 Rivers and Harbors Act or Section 404 of the Clean Water Act. Section 404 was involved in 10,718 applications. A total of 8,552 of these permits were issued. 153 permits, involving only Section 404, were denied. The remainder are still pending or have been withdrawn. The Fort Worth District, in 1981, received 67 permit applications involving Section 404, issued 45 and denied one. Somewhere between 5% and 10% of the applications were modified on the basis of comments by the Corps or by other agencies, such as the Hart's Bluff Farm Restoration requirement. In the case of the one permit denied, the basis for denial could have, and probably should have, been handled by the county commissioner's court as it involved a potential hazard to a county road. Federal intervention was somewhat of an overkill.

The cost to the federal government of operating the Section 404 permit can be measured. The Fort Worth district uses eight full-time employees and an annual budget of approximately $500,000. The Galveston District, also in Texas, handled a larger volume of Section 404 permits. They report an average of 2,200 permit applications per year of which 64% involve Section 404. They issue about 1,800 permits per year and deny about two permits per year. They modify a larger percentage of the applications than does Fort Worth, up to 35% to 40%. The cost of the program is 18 full-time employees and a budget of $1,500,000 per year.

There are no figures available as to total costs of the Section 404 permits to the applicants. Costs of some individual cases have been cited.

PRESIDENTIAL TASK FORCE ON REGULATORY RELIEF.

A Presidential Task Force of which Vice President Bush is chairman undertook to provide relief to citizens from some of the more burdensome regulations imposed by previous administrations. One of the regulations to be reviewed was the Section 404 permit program. An interdepartmental committee under the chairmanship of Assistant Secretary of the Army William R. Gianelli made proposals designed to streamline the Section 404 procedures. The proposals could not, of course, reduce the scope of coverage of the Section 404 program because that is established by the Clean Water Act, as interpreted by court order. The Gianelli committee proposals were issued last May. They reduce the seemingly endless layers of bureaucratic review associated with the permit program. The four separate levels of review allowed formerly are reduced to one. The decision of the District Engineer will be final, unless a reclama is filed at department level to the Assistant Secretary of the Army, who has the final determination in such cases. Issuance of nationwide and general permits is to be expanded. Processing an uncontroversial permit application is to be accomplished within 60 days. New memorandums of agreement on the conduct of the Section 404 program were to be signed between Army and other departments involved. More responsibility and authority is to be given the states in carrying out the program. The Army is not to override decisions made by state and local governments unless water quality, navigation or "other issues of national importance" are involved. While the administration is stated to be strongly committed to the nation's important wetlands, it recognizes that the purpose of Section 404 is not to restrict development of certain types of land. The Gianelli proposal states that Section 404 does not encompass all biological wetland, however defined, or regardless of thier connection to waters.

In implementation of this directive, new memorandums of agreement have been signed between the Army and the Departments of Interior, Commerce and the EPA. It is too early to observe their impact on the Section 404 program. The Civiletti opinion giving veto power over permits to the Environmental Protection Agency is not mentioned. The new memorandum with EPA recognizes that "the final determination will be made by the District Engineer in the vast majority of cases."

The Gianelli solution is a long overdue step in the right direction and will no doubt diminish the burden of the Section 404 problem, especially if the point is gotten across that every conceivable piece of ground that can be construed as being a wetland is not placed off limits to development.

However, what is done by executive branch order or by interdepartmental agreement can be just as easily undone, reversed, modified or cancelled. It would be far preferable to have a clear cut statute on the books that requires a majority of Congress to alter.

Reinforcement of this view is seen in the text of a letter to Secretary Gianelli, signed by 12 distinguished members of the U.S. Senate, concerning the charter on reform of Section 404. The letter stated "the charter constitutes only the initial step in a difficult journey towards implementing genuine, lasting reforms of this burdensome regulatory program. We strongly urge expeditious implementation of the charter and other needed reforms of this body of regulations."

THE ADMINISTRATION BILLS TO AMEND THE CLEAN WATER ACT.

S.2652 is a bill prepared by the administration and introduced by request by the leadership of this committee. This bill simply does not address reform of Section 404 as does S.777.

I would like to say that the administrations bill contains some highly desirable reforms of the Clean Water Act. For example, Section 14 removes dams from the category of activities requiring permits under the National Pollution Discharge Elimination System. This is needed to negate a federal judge's decision puting over 2 million dams under a requirement to be permitted.

IF S.777 IS PASSED, WHAT PROTECTION WILL THERE BE FOR THE WETLANDS?

Through court orders and administrative procedures, such federal control over wetlands as is contained in the Clean Water Act has been progressively extended so that it is now being used to impose federal land planning and land use control on local government down to the case of a single individual property owner. These are historically matters for local control. The people with the most at stake should make the decisions.

If the federal government is to control land use, including the wetlands, let this be done in an open manner, not the back door approach using Section 404. Let there be some sense of proportion introduced and let the uncertainties be eliminated insofar as possible.

Determination as to what constitutes a wetland is an uncertain process. It varies from district to district, from biologist to biologist. Some developers would want a definition that left them free of any control. Some no-growth advocates and ardent environmentalists would preserve every inch of land that could possibly be defined as a wetland. With its vast power and enormous staff, the government can and does come down heavily on the citizen or company that some federal agent has determined to be in violation. Sometimes the owner gives up on what he believes to be just because of inability to cope with the federal forces ranged against him.

In the case of my own state, Texas recognizes that coastal wetlands are of critical importance to the environment and to the economy of the state, but Texas prefers to undertake that protection itself. A resolution supporting the limitation of federal jurisdiction to the traditional definition of navigable waters has been signed by Governor William P. Clements and Lieutenant Governor William P. Hobby and will be submitted for the record.

It is respectfully urged that Congress clear up the ambiguity concerning the wetlands by passage of this bill. If development of wetlands is to be controlled, let wetlands be defined, demarcated by metes and bounds or on maps and let the owners be reimbursed for taking of property rights or otherwise compensated. The present situation is unsatisfactory, leaving decisions too much to junior federal officials, thereby inviting the courts to take over the management of the permit process.

One final word, dredging and filling are not the only ways a wetland is destroyed or altered. Withholding water supplies, drainage resulting from actions taken at other locations, introduction of new plant species, grazing and just plain eutrophication or changes by nature are equally potent and do not involve a Section 404 permit.

OTHER REASONS FOR ENACTMENT OF S.777

This administration seeks to transfer financial responsiblity for certain federal problems to state and local government in its new federalism concept. Administration of the Section 404 permit program is one of these. The current rules under which the Section 404 program must operate makes acceptance unattractive to the states because of the controversies and uncertainties involved. Many states already have regulatory bodies which operate under state rules and accomplish under their own rules most of what the federal government aims to accomplish under the Clean Water Act. The court interpretations of the Act and the administrative regulations derived from the court orders are another matter. Transfer of the program to the states would eliminate much duplicatory effort. Until the changes suggested in this bill are made, it is doubted that Texas, for one, would seek or accept primacy in the Section 404 program.

Federal government costs would be reduced considerably by enactment of this bill. As related earlier, the costs of administering the Section 404 permit program by the Corps in Texas is on the order of $2 million annually. Texas accounts for about 14% of the total permits issued nationwide. If the Section 404 permits were to be eliminated, there would still be some requirement for processing permits under Section 10 of the Rivers and Harbors Act of 1899. Still, significant savings to the government would result.

I would like to again thank the committee for permitting me to express these views on behalf of the Texas Water Conservation Association. A full text of my statement is submitted for the record together with resolutions and other expressions of support of this measure by the state of Texas, the Trinity River Authority, the San Antonio River Authority, the Edwards Underground Water District, and the North Texas Commission.

TESTIMONY PREPARED BY

JAMES O. JONES

TO BE PRESENTED ON JULY 29, 1982

BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL

POLLUTION OF THE SENATE COMMITTEE ON

ENVIRONMENT AND PUBLIC WORKS

My name is James O. Jones and I am Manager of the Coastal Resources Section of Espey, Huston & Associates, Inc. (EH&A), an environmental and engineering firm based in Austin, Texas. I received a Bachelor of Science degree in Oceanography (Marine Biology) from Lamar University in Beaumont, Texas and a Master of Science degree in Environmental Management from the University of Houston at Clear Lake City in Clear Lake City, Texas. Prior to joining EH&A in 1980, I was employed by the Galveston District of the U.S. Army Corps of Engineers (USCE) in the regulatory program for approximately seven years. While at the Galveston District, I worked both in enforcement and permit processing. I began working for the USCE in 1974, shortly before the Section 404 permit program went into effect, and have been actively involved in the regulatory arena ever since.

First, let me emphasize that I am not a legislative technician, and I am not here to comment on the proposed legislation. My testimony today represents my evaluation of the current implementation of the Section 404 permit program and the effects that the proposed regulations from the Corps of Engineers may have on the program. My view is a personal one, as I work daily with the Section 404 permit program.

The proposed changes in the regulations that govern the Corps of Engineers' activity concerning Section 404 are a welcome reform. Under the present system, not enough pressure is placed on the USCE districts to issue timely decisions on permit applications. Further, although the use of the General Permits has become more widespread over the past year, those could be and seemingly will be even more successfully implemented to reduce workload. In addition, further pressure needs to be placed on the Corps to limit the granting of extensions to the comment period on permit applications.

These changes will be implemented by the new regulations that will become final next month, as published by the Corps of Engineers. However, there are serious problems that the regulatory changes will not resolve. First, the USCE will pursue the transfer of authority to the states, but it will probably be in the form of General Permits for specific activities. I do not believe that there will be significant transfer of authority under Section 404 to the states unless there are more incentives offered to the states, and the states' roles are clearly and properly delineated. Second, although the goal of the administrative reforms is to introduce a reasonable degree of certainty into the scope of the Section 404 program, the very nature of wetlands does not lend itself to certainty. The current system for defining wetlands is imprecise and inaccurate. In my judgment, the current factors for identifying wetlands cannot be

used by the average non-technical person to make wetland determinations. Third, the regulatory reform effort does not offer solutions to the day-to-day operational problems experienced by the districts. I feel the administrative problems which have developed in the USCE districts are not entirely due to an overwhelming increase in the number of permit applications being processed or delays caused by commenting agencies; many are the result of clerical delays within the district office. Fourth, the regulatory reform effort does not encourage administrative assistance from the private sector. This assistance can range from managing office information and permit applications, to giving the applicant the option of printing his own public notices at his expense; such help would alleviate the districts which are already overloaded and cannot handle their existing workload, much less develop General Permits while dealing with the cuts in manpower. Now let me elaborate in more detail.

To begin with a general observation, the extent to which regulatory changes will be accomplished depends largely upon the ability and/or willingness of the USCE districts to implement these changes. My experience has been that administrative reforms handed down to the districts are generally not followed by either the necessary support and guidance or the needed incentive to see that the reforms are implemented. In the past, the Office of the Chief of Engineers (OCE) has not taken the extra step of working with the individual districts to identify that district's particular problems and offering solutions to the problems. If the current reform effort is to be successful, this extra step will have to be taken.

Assuming that the reforms are implemented, several regulatory changes will

be accomplished. First, additional pressure will be placed on the USCE districts to issue timely decisions on permit applications. Although consideration responsibility now rests with the districts, the current changes further restrict the district's ability to defer a decision. The same is true for the field offices of the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the Environmental Protection Agency (EPA) and the state wildlife agencies. The pressure will be on these groups to either negotiate a reasonable project or be able to demonstrate significant environmental damages.

A second change which will result is that the processing time constraints imposed by the reforms will require the USCE to increase its use of the General Permits. Currently, the use of General Permits is one of the most effective tools available to the USCE for reducing the permit processing workload. The USCE is already taking steps to make use of this tool. Over the past year numerous General Permits have been successfully implemented. The interim final regulations for regulatory programs, published by the USCE in the 22 July 1982 Federal Register, contain 25 nationwide permits for specific activities in navigable waters. One of the more significant nationwide permits issued authorizes structures for the exploration, production and transport of oil, gas and minerals on the outer continental shelf. This particular nationwide permit will have a significant impact on the workload of the Gulf Coast districts. For example, in the Galveston District this nationwide permit will decrease the number of permits processed by approximately 500 per year. In terms of manpower, this will free up one person to process other permits. This translates into a 20% increase in manpower. To maximize the effectiveness of the General Permits, however, there is a need to better coordinate these efforts among the districts to insure that duplication of

effort is reduced. The approach to developing General Permits, to date, has been to allow each of the districts to develop their own permits. If not properly coordinated, several districts may expend resources developing the same General Permit.

A third change is that the time constraints will also significantly limit the granting of extensions to the comment period on permit applications. The USCE has already taken steps to limit these extensions, but the increased pressure to reduce processing time will further limit the granting of these extensions. This in turn will place added pressure on potential objectors to either respond during the comment period or justify the request for extension.

The reforms will also require a streamlining of the USCE procedures for complying with the requirements of the National Environmental Policy Act as well as reduce the time required to conduct investigations required under the National Historic Preservation Act. In the past, delays have been experienced on permits where cultural resource surveys were required because of misunderstandings between the USCE district and the State Historic Preservation Officer as to the responsibilities of each. Therefore, the USCE needs to insure that its district regulatory personnel are knowledgeable of the applicable procedures.

The applicant will benefit from the requirement that the USCE clarify and minimize the information necessary to initiate processing. Currently, the applicant is faced not only with varying information requirements among the districts, but also among permit processors within the same district. For example, different levels of information have been required for nearly identical applications submitted a month apart. Consistent

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information requirements will result in fewer delays due to incorrectly completed applications.

The regulatory reform effort will also affect the permit applicants. Additional pressure will be placed on the applicant to be aware of the requirements for a complete permit application and to insure these requirements are met. If a decision is to be reached in 60 days, the applicant will be required to do his part. This expedited processing of permit applications may have an undesirable result for the applicant in that more applications may be denied. Unless potential objections have been resolved prior to submission of the application, the USCE may have no alternative but to deny a permit if the applicant insists on a 60 day decision without satisfactorily responding to objections. The directive to the USCE is to expedite processing and produce more timely decisions. The USCE has not been directed to issue permits faster.

Finally, the USCE has been directed to adopt administrative measures to reduce the average time for obtaining a decision on a permit application to within 60 days of receipt of the application. As part of this effort the USCE has committed to establishing an internal monitoring system to insure that the time limits are strictly observed. This particular change is probably the most crucial to insuring that the above described regulatory changes will occur. As I previously stated, the administrative reforms will not be effective unless the progress of the districts is monitored and problems corrected as necessary.

There are also several problems which the regulatory changes will not resolve. Although the USCE will take steps to clarify permitting procedures and requirements,

there is no commitment to educate the public on, not necessarily the fine details, but the basic steps and requirements for obtaining a permit. Based on past experience, I have found that a significant number of delays resulted from a lack of knowledge on the part of the applicant. These were delays which could have been avoided had the applicant been better informed.

The USCE will pursue the transfer of authority to the states, but it will most likely be in the form of General Permits for specific activities. I do not believe that there will be significant transfer of authority under Section 404 to the states unless there are more incentives offered to the states, such as funding.

Although the goal of the administrative reforms is to introduce a reasonable degree of certainty into the scope of the Section 404 regulatory program, the very nature of wetlands does not lend itself to certainty. Wetlands are dynamic systems and it would be extremely difficult, if not impossible, to define the Section 404 jurisdictional boundaries in finite terms. The presence of wetland vegetation should not be the only jurisdictional parameter. Other factors which must be considered are the location of the area in relation to other water bodies and the function and relative importance of the area. In South Texas it is not unusual for wetland species to be found growing at elevations in excess of 3 ft mean sea level and not subject to tidal inundation or saturated soil conditions. Also, due to natural forces such as erosion and subsidence, it is not possible to say that an area which is not wetlands today will not be wetlands by next year. In addition, the identification of wetlands requires the ability to identify vegetation as well as a knowledge of soil types and hydrology. Given these conditions it is not likely that criteria can be developed which will allow the

average non-technical person to make wetland determinations.

The regulatory reform effort does not encourage administrative assistance from the private sector. Many times solutions to problems can best be found by an outside party with a different perspective. In particular, members of the oil and gas industry have offered to provide administrative assistance to the USCE districts to assist them in expediting the processing of all permits. Such assistance may vary from developing computer programs to managing office information and permit applications, to giving the applicant the option of printing his own public notices at his expense. Many of the permit applicants have the resources and the capability to develop General Permits. This would be especially useful to the districts which are already overloaded and cannot handle their existing workload, much less take time to develop General Permits. However, the districts have not been receptive to outside help in such matters.

Most importantly, the regulatory reform effort does not offer solutions to the day to day operational problems experienced by the districts. I feel the administrative problems which have developed in the USCE districts are not entirely due to an overwhelming increase in the number of permit applications being processed or delays caused by commenting agencies. In fact, the total number of permits, both Section 10 and Section 404, remained constant or decreased between 1977 and 1980. Over the past two years, the majority of the delays we have experienced were caused by clerical delays within the district office. For example, in the Galveston District the typing and printing services required by the regulatory office is processed together with that of the rest of the district. The result has been three and four week delays in public notices because the contracted printer has other printing jobs from the district which were given higher

priority. Similar delays have been experienced in getting decision documents and permits typed because the typing pool is previously committed to other work. If the USCE districts are to meet expedited deadlines for permit decisions, then the clerical and reproduction services for the regulatory offices must be segregated from those of the rest of the district or, at the very minimum, given priority.

To fully implement the administrative reforms and begin seeing results will take at least a year. I believe that the reform efforts will show results in some of the districts sooner than others, mainly due to the differences in workloads. The regulatory changes will take the longest in the coastal districts. For the short term, the manpower resources of certain USCE districts may be stressed even further than they are already. The regulatory changes to be implemented will require that personnel be diverted from their present work which may result in processing delays. However, I feel that the USCE has sufficient manpower and resources to implement the changes while minimizing delay. To accomplish this it may be necessary for the USCE to transfer personnel among the districts.

In summary, the current regulatory reform effort will bring significant changes to the Section 404 permit program. Some of these changes are already in place. Additional pressure will be placed on the USCE and the USFWS, NMFS and the EPA to be more expeditious and reasonable in the processing and assessment of permit applications. Additional pressure will also be placed on the permit applicant to submit accurate and complete applications. However, the successful implementation of these changes will depend on support and guidance from OCE.

Finally, let me say that my testimony is offered in a spirit of cooperation. I emphasize that my observations are made from the trenches. Problems exist. Regulatory changes are being made that will alleviate some of those problems, but not all of them. I reiterate that I am not a legislative technician; I deal with the law once it is made, and therefore I am not going to comment on the possible parameters for a legislative change. I will assert, however, that I see room for a legislative change that would help clarify some of the problems I have set forth and I would welcome that change.

Again, my thanks for allowing me to testify before you today.

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

STATEMENT OF

DR. JAY D. HAIR

BEFORE

THE SENATE SUBCOMMITTEE ON

ENVIRONMENTAL POLLUTION

OF THE

SENATE COMMITTEE

ON

ENVIRONMENT AND PUBLIC WORKS

CONCERNING

S.777

ON JULY 29, 1982

ON BEHALF OF

NATIONAL WILDLIFE FEDERATION
ENVIRONMENTAL DEFENSE FUND
NATIONAL AUDUBON SOCIETY
IZAAK WALTON LEAGUE OF AMERICA
FRIENDS OF THE EARTH
ENVIRONMENTAL POLICY CENTER
CENTER FOR ENVIRONMENTAL EDUCATION
CHESAPEAKE BAY FOUNDATION
AMERICAN LEAGUE OF ANGLERS
CLEAN WATER ACTION PROJECT
TROUT UNLIMITED
THE SIERRA CLUB

Introduction

Mr. Chairman, Members of the Subcommittee, I am Dr. Jay D. Hair, Executive Vice President of the National Wildlife Federation. I am here on behalf of the Federation, the National Audubon Society, the Environmental Defense Fund, the Izaak Walton League of America, Friends of the Earth, the Environmental Policy Center, the Center for Environmental Education, Chesapeake Bay Foundation, American League of Anglers, the Clean Water Action Project, Trout Unlimited, and the Sierra Club to voice our strong opposition to S.777. The numerous organizations I am speaking for demonstrates a broad base of support for the continued preservation and enhancement of our wetlands and water resources. S.777 poses a serious risk to these resources.

S.777 once again raises the fundamental question of whether the Clean Water Act ("CWA") will continue to control water pollution or will be reduced to a navigation law. When enacting the CWA ten years ago, Congress fully intended for the law to preserve and enhance the "chemical, physical, and biological integrity of the Nation's waters" by controlling the discharge of environmental pollutants into these waters (Sections 101(a) and 301). For the past ten years, principally through Section 404 (covering dredge and fill disposal activities) and Section 402 (covering the disposal of other pollutants), the CWA has served this purpose.

Congress intended that the pollution control mandates of the CWA cover discharges into "all waters of the United States." As Senator Muskie stated:

> ... [I]n 1972, the Congress broadened the traditional definition of navigable waters in recognition of the fact that pollutants migrated into the Nation's waters through water courses, swamps, creeks, and underground sources, many of which were simply not "navigable" in the traditional sense but the pollutant impact was sufficient to merit regulation.

Cong. Rec. S9760-62 (June 5, 1975).

Six years ago bills and amendments almost identical to S.777 were introduced to restrict Section 404 to the "navigable waters." They did not pass. Instead, more moderate, reasoned and carefully circumscribed amendments to Section 404 were enacted that retained the broad jurisdictional scope of Section 404 over "all waters of the U.S." To eliminate concerns about overregulation Congress exempted farmers, foresters, and ranchers, authorized the issuance of general permits, and provided for state takeover of Section 404 for the non-navigable waters. In refusing to reduce the jurisdictional scope of the Section 404 program, Congress reaffirmed its intention to protect this Nation's wetlands through Section 404:

> "Without it [Section 404], critical aquatic areas including swamps, marshes and submerged grass flats, which are an important segment of this Nation's water resources and are essential to the preservation of migratory and resident fish, birds, and other animal populations, might otherwise be irrevocably destroyed."

> "The Section 404 program as outlined in the committee bill will be a successful and reasonable process for protecting inland and coastal waters, including wetlands, from adverse environmental effects resulting from the discharge of dredged or fill material."

Legislative History of the Clean Water Act of 1977, at 413.

The importance of regulating the destruction of wetlands under Section 404 was recognized:

> "There is no question that the systematic destruction of the Nation's wetlands is causing serious, permanent ecological damage. The wetlands and bays, estuaries and deltas are the Nation's most biologically active areas. They represent a principle source of food supply. They are spawning grounds for much of the fish and shellfish which populate the oceans and they are passages for numerous upland game fish. They also provide nesting areas for a myriad of species of birds and wildlife.
>
> The unregulated destruction of these areas is a matter which needs to be corrected and which implementation of Section 404 has attempted to achieve."

Legislative History of the Clean Water Act of 1977 at 869 (Committee Print 1978).

S.777 would have this Congress radically retreat from its ten year commitment to protect all of this Nation's waters, especially its wetlands, and turn the clock back to before 1972 when the federal government's principal concern was navigation.

S.777 is an unjustified attack on the Nation's wetlands and the Section 404 program. It ignores the tremendous value of our wetlands, eliminates the vast majority of them from federal control, and misrepresents how the Section 404 program is being implemented. S.777, if enacted, would have a disastrous impact on our wetland resources.

What S.777 Would Do

S.777 would:

1) Restrict the definition of "navigable waters", for the purposes of Section 404, to waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvements, as a means to transport interstate or foreign commerce;

2) Exclude all discharges of dredged or fill material into waters and wetlands not covered by this new definition from prohibition or regulation under Section 404 of the CWA, or Sections 9, 10, or 13 of the 1899 Rivers and Harbors Act;

3) Shift the burden of demonstrating compliance with the Section 404(b) guidelines from applicants to the Corps.

4) Weaken the ability of Section 404 to protect even the navigable waters by allowing the Corps of Engineers to consider factors other than the Section 404(b) environmental guidelines when judging the merits of a dredge or fill activity;

5) Repeal the optional State Permit Programs currently authorized under Section 404; and

6) Eliminate the application of all federal laws to the discharge of dredge or fill material into non-navigable waters.

These changes are discussed below.

The restrictive definition of navigable waters in S.777 would remove from federal protection 85 percent of the nation's wetlands, or 126 million of the 148 million acres currently

covered and hundreds of thousands of miles of river and lake shoreline. A few examples of exempted wetlands include:

- Ninety percent of the remaining 5 million acres of bottomland hardwoods in the lower Mississippi Valley.
- All of the 2 to 2.3 million acres of prairie potholes in North Dakota;
- Over 1,259,000 acres of freshwater wetlands in New York;
- Almost 670,000 acres of undisturbed pocosin wetlands in North Carolina;
- The white cedar swamps in the New Jersey pine barrens;
- The Great Dismal Swamp in Virginia;
- Large portions of Florida's everglades;
- The riparian wetlands and intermittent streams of the West; and
- Much of Alaska's tundra.

The impact of S.777 is not limited to Section 404. It would exempt all waters which had ever served as waters of commerce in the past from regulation under the 1899 Rivers and Harbors Act ("RHA"). These so-called historically navigable waters have been protected since at least 1921. (See, Economy Light and Power Co. v. United States, 256 U.S. 113 (1921)). S.777 reaches back and exempts the historically navigable waters from the RHA[1/].

1/ It is estimated that 518,000 miles of river and 37,000 miles of lake shoreline are historically navigable or susceptible to navigation. Most of our rivers and lakes are historically navigable.

Also exempted from the RHA are activities on non-navigable waters that would adversely impact navigable waters. Currently, the federal government can regulate activities beyond the limits of navigability if they adversely affect the navigable waters. (United States v. Rio Grande Irrigation Co., 174 U.S. 690 (1899)). In light of these restrictions, S.777 would eliminate the general ability of the United States to protect its public waters under the RHA, and sets our pollution control efforts back to the last century.

S.777 would have a serious impact on the chemical, biological and physical integrity of all the nation's waters, including the navigable waters. For example, S.777 would prevent the federal government from regulating the discharge of contaminated dredge or fill material into non-navigable tributaries and wetlands. Because our waters are ecologically and hydrologically interrelated, contaminanted dredge and fill materials containing PCB's, arsenic, kepone, DDT, mercury, and other heavy metals that are discharged into the non-navigable waters will find their way into the navigable waters as well. Whether discharged into non-navigable or navigable waters, these contaminants will adversely affect water quality, pose serious human health risks and harm fish and wildlife resources.

Furthermore, the destruction of wetlands at the headwaters of our navigable and non-navigable rivers, streams, and tributaries would alter the quality and timing of water flows into the navigable waters, and thus would adversely modify the

physical and biological integrity of the navigable waters. Yet this destruction would be exempt from federal control under S.777.

In 1976 and 1977, Congress refused to restrict the federal government's pollution control authority to the navigable waters precisely because of this ecological interdependence of our waters:

> The objective of the 1972 act is to protect the physical, chemical, and biological integrity of the Nation's waters. Restriction of jurisdiction to those relatively few waterways that are used or are susceptible to use for navigation would render this purpose impossible to achieve. Discharges of dredged or fill material into lakes and tributaries of those waters can physically disrupt the chemical and biological integrity of the Nation's waters and adversely affect their quality. The presence of toxic pollutants in these materials compounds this pollution problem and further dictates that the adverse effects of such materials must be addressed where the material is first discharged into the Nation's waters. To limit the jurisdiction of the Federal Water Pollution Control Act with reference to discharges of the pollutants of dredged or fill material would cripple efforts to achieve the act's objectives.

Legislative History of the Clean Water Act of 1977, at 708 (Committee Print).

That ecological interdependence continues today.

We are concerned that S.777 would shift the burden of compliance under Section 404. Currently the applicant carries the burden of demonstrating that dredge or fill activity

complies with the Section 404(b) environmental guidelines. S.777 would shift that burden to the Corps by requiring permit issuance unless the Corps can demonstrate non-compliance with the guidelines. This shifting burden would increase the Corps' workload and could in turn slow down permit processing in direct conflict with the stated purpose of S.777.

Finally, S.777 by eliminating control over dredge and fill activities in non-navigable waters "notwithstanding any other provision of law" would prevent the regulation of dredge and fill activities under other laws including the Endangered Species Act, Marine Mammal Protection Act, Fish and Wildlife Coordination Act and Eagle Protection Act. This applies to private individuals and federal agencies.

S.777 Is Not Justifiable

S.777 states that the federal government should not regulate non-navigable waters because:

> "the procedures mandated by and regulations issued pursuant to the Federal Water Pollution Control Act [Clean Water Act] and the Act of March 3, 1899 [Rivers and Harbors Act] have delayed the construction of needed energy water resource and other development projects without commensurate benefit to the Nation." (Section 1)

This finding is not correct. Of the approximately 76,400 permit applications filed with the U.S. Army Corps of Engineers under Sections 10 and 404 from 1977 through 1980, only 969--less than 1.3 percent--were denied (See Appendix I). Thus permit

denials are not causing delay. Permit denial, however, is essential if we are to protect valuable wetland and water resources from unwise projects. For example, the Corps refused to issue a Section 404 permit for the Davis Power Project that would have flooded Canaan Valley in West Virginia. Canaan Valley, designated a "national landmark" in 1975, contains more than 40 percent of the state's wetlands and is the largest remaining shrub swamp on the east coast.

Permit processing is not causing significant delay. Section 404 requires decisions on permits to the "maximum extent practicable" within 105 days of receipt of a complete application (15 days for issuance of a public notice, and an additional 90 days for public review and comment and interagency review). Permit processing periods that comply with the recommended processing periods cannot be considered to cause delay.

From 1977 through 1981, 70 percent of the permit applications submitted to the Corps took, on average, less than 75 days to process. During that same period, the average processing time for all permit applications, except those requiring the preparation of an EIS, was 131 days.[2/] These processing times demonstrate that the Section 404 program is being implemented efficiently.

2/ Fifteen EISs were prepared for permit actions in FY 1980, 14 in FY 1979 and 18 in FY 1978. On average, these 47 permit actions took 815 days. These processing times were necessary for compliance with NEPA.

While certain permit applications have experienced lengthy processing times, the Section 404 program should not be judged solely on the basis of these applications for several reasons. First, delay is frequently justified because of the complexity of the project involved and the potential for impacts to natural resources. Second, most responsibility for what delay there is rests with permit applicants. EPA and the Corps report that applicant inaction is the primary cause of delay. Third, it is inappropriate and misleading to view the program on the basis of "worst case" examples. Rather the program should be judged on the basis of its overall performance. Fourth, to the extent delay exists, that delay does not justify exempting 126 million acres of wetlands from regulation. The U.S. Army Corps of Engineers Institute for Water Resources ("IWR") recently conducted a detailed 235-page impact analysis of the Corps' permit program.[3/] While recognizing that there are costs associated with permit processing delays, IWR concluded that:

> "The current baseline operations of the Corps of Engineers regulatory functions program results in a net positive benefit to the Nation... Most of the regulatory program

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3/ Impact Analysis of the Corps Regulatory Program, A Report Submitted to the Regulatory Functions Branch, Office of the Chief of Engineers, November 1981 (Draft).

> benefits accrue due to avoiding costly water quality contamination, navigation obstruction and safety risks, and excessive wetland loss." (Emphasis added)

IWR Report, pp. 89-93.

Even if Sections 10 and 404 were causing delay, a restrictive definition of "navigable waters" would not solve the problem. Only 17 percent of all permit applications received by the Corps of Engineers are for activities in non-navigable waters. Thus, if enacted, S.777 would have little impact on the number of applications the Corps of Engineers would process each year since eighty-three percent of the activities currently covered by Sections 10 and 404 would continue to be regulated under S.777 (Appendix II).

S.777 also incorrectly asserts that the Section 404 permit program has not benefited the Nation. Section 404 is credited with reducing the yearly loss of wetlands from 600,000 to 300,000 acres. In view of the considerable value of wetlands, as discussed below, Section 404 has benefited the Nation. The IWR identified the reduction of wetland losses attributable to Section 404 as an important reason why the permit program provided net benefits to the Nation.

Section 404 has also unexpectedly benefited developers. Project modifications developed during the processing of permit applications have reduced the construction costs for 30 to 50 percent of the proposed projects, representing a 15 percent savings in total project costs. In 1980 these savings ranged between $136 and $271 million (Appendix III).

S.777 Is Unnecessary

Taken at face value, the sole concern of S.777 is that permit processing under Sections 10 and 404 is causing delay. Even if unreasonable delay could be demonstrated, legislation is not necessary to correct the problem. The Section 404 program has adequate tools for administrative efficiency. Those tools are being fully employed and in some cases over utilized by the agencies.

First, the Corps is authorized to issue general permits on a state, regional, or nationwide basis (Section 404(e)). In most cases, general permits eliminate altogether processing of individual permit applications, therefore they contribute significantly to administrative efficiency. The Corps has taken advantage of the general permit provisions. Before July 19, 1982 there were 361 regional and 5 nationwide permits in effect (IWR Report, p. 21.). These permits eliminated the need for 60,000 individual permit applications each year.

On July 22, 1982, the Corps greatly expanded the scope of its nationwide permits by issuing 26 new nationwide permits (47 Fed. Reg. 31794 et seq.). Two of these permits authorize the disposal of dredge and fill material into the following waters without any federal oversight:

(1) Non-tidal rivers, streams, their lakes and adjacent wetlands located above the headwaters, and

(2) All other non-tidal waters that are not part of a surface tributary system to interstate or navigable waters.

Through these new nationwide permits the Corps has achieved by regulation most of what S.777 sets out to do legislatively: eliminate federal control over much of the Nation's wetlands resources. For example, the nationwide permit for non-tidal waters that are not part of a tributary system currently exempts over 48,000 acres of the 88,000 acres of waters in Rhode Island that are regulated by Section 404. That same permit exempts over 700,000 acres of prairie potholes in North Dakota, South Dakota, Minnesota, Montana and Iowa.

We do not sanction all of these new nationwide permits. In fact, we believe several seriously undercut the federal government's ability to meet the objectives of the CWA, and do not comply with the minimal environmental impact requirements of Section 404(e). We mention these permits merely to demonstrate the willingness and desire of the Corps to reduce the impact of the regulatory burdens associated with Section 404. In addition the Corps is developing statewide general permits at this time for all 50 states. These permits too would greatly reduce federal oversight of dredge and fill activities.

Second, many dredge and fill activities are already exempt from Section 404. They include: 1) normal farming, forestry, and ranching activities; 2) maintenance of currently serviceable structures; 3) construction or maintenance of farm and stock ponds or irrigation ditches, or maintenance of drainage ditches; 4) construction of temporary sedimentation basins on

uplands; 5) construction or maintenance of farm, forest, or temporary mining roads, where performed in accordance with prescribed best management practices; and 6) activities regulated by statewide programs approved under Section 208(b)(4) to control minor discharges through best management practices (Section 404(f)).

Third, many federal construction projects are exempt from Section 404--projects specifically authorized by Congress and entirely planned, financed and constructed by a federal agency, provided that Congress reviewed an EIS for the project before authorizing it or appropriating funds.

Fourth, NMFS, FWS, EPA and the Corps have entered into agreements to eliminate delays in permit issuance, and to the maximum extent possible, make permit decisions within 90 days of public notice of a permit application (Section 404(q)). The agencies have complied with the spirit of this Congressional directive. For example, the Southeast Region of NMFS completes review of 97 percent of its permit applications within 30 days.[4/] The FWS between July 1 and December 31, 1980,

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4/ Statistics on the Importance of NMFS' Habitat Protection Program Involvement in the Corps of Engineers' Section 404 Regulatory Program under the Clean Water Act and Habitats of Importance to Living Marine Resources, NMFS, Habitat Protection Branch, 1982, "NMFS Report".

averaged 22.5 days in reviewing 6,442 permit applications.[5/] EPA between October 1, 1979 and March 31, 1980 reviewed 13,824 permit applications in an average of 24.9 days.[6/]

In view of the many provisions in Section 404 that assure the efficient operation of that program, and the zeal with which the Department of the Army is implementing these provisions[7/], and the activities that are already exempted under the act, S.777 would add virtually nothing to the administrative efficiency of Section 404, while undermining its purpose.

S.777 Provision For State Request For Federal Jurisdiction Is A Hollow Gesture

S.777 allows the federal government to extend application of Section 404 to non-navigable waters listed by a state if requested by the Governor and the state legislature. This provision does not salvage S.777.

First, there is no justification for placing the burden of asserting federal jurisdiction over wetlands on the state's

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5/Draft Fish and Wildlife Service Section 10/404 Permit Program Summary of Major Statistics July 1-December 31, 1980, "FWS Summary."

6/Section 404 Permit Program: Final Results of Regional Office Questionnaire, U.S. Environmental Protection Agency Office of Federal Activities (A-104) 404 Program Branch, "EPA Report."

7/The Deputy Director of Civil Works for the Corps of Engineers recently ordered his District Engineers to reach decisions on permit applications within 60 days and to reduce the public comment period on permit applications from 30 to 15 days. Regulatory Guidance Letter 82-7, June 8, 1982.

shoulders. This nation's wetlands are a national resource, therefore, the federal government should be responsible for their protection.

Second, it is highly unlikely that any state would, or could, make such a request. For example, although Section 404(g) has authorized state takeover of Section 404 for the non-navigable waters for five years, only one state has requested that authority. With such a lack of interest, why assume that the states would invite federal regulation of their non-navigable waters?

Third, the states may pick and choose which wetlands and waters the federal government would regulate, subjecting federal control over wetlands to the discretion of the states. This approach would lead to inconsistencies in the application of federal authority. Important wetlands, even where there is a clear national interest, might not be subject to any regulation. For example, it is unlikely that North Dakota would request federal control over its prairie potholes.

We believe that Section 404 currently establishes the proper role for the states. EPA may delegate control over non-navigable waters to the states under well-defined federal criteria. Under that scheme the federal government can protect the national interest in these wetlands, while allowing the states, should they choose, to assume day-to-day responsibility. S.777 threatens to undo that carefully crafted federal-state partnership.

The Wetlands And Waters Left Unprotected by S.777 Are National Resources

Wetlands are the most productive areas on earth and perform functions that provide important national economic and environmental benefits. Hunters and trappers have long recognized the importance of wetlands for wildlife and have been influential in their preservation. Recreational and commercial fishermen also recognize the values of wetlands as spawning and rearing areas and as a food base for fish. Only recently we have come to realize that wetlands play many crucial roles in water quality, water retention, groundwater enhancement, erosion control, and soil and nutrient trapping. Wetlands do not have to be part of a navigable water system to provide benefits to the nation.

Wetlands are essential to maintaining healthy populations of wildlife and fish. Inland, freshwater wetlands provide vital breeding, resting, molting, and wintering areas for migratory waterfowl. Ten to 12 million ducks breed in the wetlands of the lower 48 states, and 60 to 70 percent of these breed in the prairie potholes. Bottomland hardwood wetlands provide wintering habitat for over 20 percent of the nation's mallard population, 50 percent of the wood ducks, and 55 percent of the woodcock. The potholes and bottomlands would no longer be protected under S.777. S.777 could have serious economic consequences because recreational hunting of migratory waterfowl pumps more than $949 million into the nation's economy each year.

Freshwater wetlands are also essential to many species of terrestrial wildlife. Furbearers including muskrat, otter, mink, raccoon, beaver and nutria rely on wetland habitats. The value of the Nation's harvest of wetland-dependent fur bearers was more than $1 billion in 1980. In addition to fur, Louisiana allows a commercial harvest of alligators. In 1979, over 16,000 alligators worth about $1.7 million were harvested in Louisiana's coastal region.

Wetlands provide critical habitat for as many as 76 federally endangered or threatened wildlife species, and many more species of state listed endangered or threatened plants and animals.

Coastal and inland wetlands are essential to fish and shellfish. Two-thirds of the commercial fish species caught on the Atlantic and Gulf Coasts are wetland-dependent, and half of the species caught on the Pacific Coast depend on wetlands for habitat at some stage in their life cycle. Some of these species, like salmon, require shallow riffle and riparian areas for spawning. These areas are far from the navigable waters. Others, species like shrimp, require estuarine wetlands for habitat.

Freshwater wetlands moderate surges of freshwater into the estuaries, and thereby stabilize salinity levels. Many fish and shellfish species, such as juvenile shrimp and flounder, are highly sensitive to changing salinity levels. For example, freshwater wetland losses in coastal North Carolina are costing that state's economy as much as $2.2 to $2.5 million annually

in seafood harvest losses. Inland freshwater wetlands are also an important part of the energy base and food chain for a vast majority of commercially important fish and also serve as a buffer to water quality changes that adversely affect these species.

Wetlands are the foundation of a multi-billion-dollar recreational and commercial fishing industry. Their destruction would harm the economy. Nationwide, the annual value of commercial fishery products is approximately $6.2 billion.

In 1980, 53.9 million Americans spent $17.3 billion dollars in pursuit of fish and shellfish. Of this, two thirds was spent on freshwater fishing while one third went to salt water fishing (U.S. Fish and Wildlife Service 1982).

Many recreational fish species require wetland habitat for escape cover as juveniles and adults, and for food in the form of detritus, plankton, invertebrates, and other fish. For example, largemouth bass utilize emergent vegetation of wetlands for cover, food and spawning. Northern pike require lake or streamside marshes for egg laying and nursery areas. In the Great Lakes region, yellow perch, pike, and pickerel all require wetlands for spawning. There are a number of commercial and recreational fish and shellfish that use the bottomland hardwood swamps for spawning during high water including crayfish, drum, bream, catfish, and bass.

Wetlands also provide important hydrological values. They reduce flood damage, by buffering the effects of high storm flows, and by stalling peak levels of a flood thus lowering maximum flood levels. For example, eliminating 40 percent of the wetlands in the Charles River Basin in Massachusetts would increase flood damages by at least $3,193,000 annually and the loss of the entire 8,422 acre wetland base in the Basin would produce average annual flood damages of $17,084,000. Similarly, the loss of ten percent of the wetlands in the Neponset River Basin in Massachusetts would increase flood peaks by 0.15 meters; a 50 percent loss of wetlands in the basin would increase flood peaks by 0.9 meters.

A study of Wisconsin watersheds concluded that flood water levels throughout the state are 80 percent lower in basins consisting of 40 percent lake and wetland areas than in basins with no lake and wetland area.

Wetlands recharge groundwater. In Wisconsin, the 5 square mile Cedarburg Bog controls the groundwater supply for an area of approximately 165 square miles near Milwaukee. The value for groundwater recharge alone of each acre of wetland at a site in Massachusetts was estimated to be $16.50 per day or $6,044 per acre per year.

Wetlands also reduce water pollution. They trap and hold sediments, thereby reducing streamside erosion and preventing downstream sedimentation. At a site near Pennville, New Jersey, slurry effluent discharge into a wetland area left the wetland with negligible turbidity.

Wetlands improve water quality. For example, Wildwood, Florida discharges the effluent from their waste treatment facility into a 506-acre gum-cypress swamp that removes 98 percent of the phosphorous, 90 percent of the nitrogen, and reduces fecal coliform bacteria by more than 99.9 percent. This wetland waste treatment is valued at $80,000 per year.

The waste treatment capability of the wetlands in the Charles River Basin, Massachusetts, was valued at $16,960 per acre.

Mountain Creek in Georgia, polluted by human sewage and chicken offal, was designated "clean" by the Georgia Water Quality Control Board after passing through 2.75 miles of Alcovy River swamp forest and its water quality was considered excellent after traversing another 7 miles of the swamp. The value of the 2,300 acre Alcovy River Swamp ecosystem for water pollution control was estimated at $1 million annually.

Appendix IV contains an expanded discussion of wetland values.

WETLAND LOSSES

This nation's wetlands are in trouble. Barely more than half remain. One million acres of coastal marsh have been lost in just the last 20 years. We are losing wetlands at a rate of 300,000 acres per year, approximately 100,000 acres are coastal wetlands. Wetland losses at the state and regional level are even more sobering:

- About 600,000 acres of Texas' coastal wetlands have been lost to dredge and fill activities.
- Seventy percent of the original wetlands found in Oklahoma are gone.
- At the current rate of loss, by the year 2000, only 14 percent of the marshes found in Connecticut in 1914 will remain.
- Iowa has lost 99 percent of its original glacial wetlands.
- Louisiana is losing coastal marshes at a rate of more than 50 square miles each year.
- Only 450,000 acres of California's original 3.5 million wetland acres remain.
- South Florida has lost a fourth of its wetlands in the past 20 years.
- One half of the prairie potholes of the upper mid-west had been lost by 1950, and about 48,000 acres of prairie wetlands are lost annually now.
- Great Lakes marshes have decreased by 71 percent.
- Southeastern Wisconsin had lost 61 percent of its marshes by 1968.
- Over 80 percent of the bottomland hardwood swamps of the lower Mississippi valley have been lost.
- Arkansas has lost one-half of its wetlands.
- Ninety-five percent of Illinois' wetlands are gone.

Appendix V contains additional wetland loss information.

This staggering loss of our wetland resources would be exacerbated by S.777.

CONCLUSION

S.777 is a misguided bill. Posturing as a bill to eliminate delay in the construction of needed projects, S.777

would have this Congress abandon the federal interest in water resources of national importance. Amending Section 404 of the Clean Water Act to narrow its coverage to navigable waters will not serve the intended purpose of S.777. Such an amendment would, however, place the federal government squarely behind those that would drain, fill, and build over our wetland resources. Left unprotected, our wetlands will be destroyed. History tells us that.

The federal government shares the responsibility for the destruction of our wetlands. Federal public works projects, crop price support and disaster payment programs, and tax credit and deductions for land clearing and drainage have fostered wetland destruction. Section 404 provides some balance in this vast array of federal programs that assist wetland destruction.

Section 404 is a vital section of a vital piece of pollution control legislation. It has not been used to stop development, but instead has minimized the damage caused by development. Section 404 was designed to protect our water and wetland resources. That protection cannot be achieved by limiting federal involvement to the navigable waters.

We respectfully urge this Committee to stop S.777 here and not allow it to go to the Full Committee. The future of a vital part of our national heritage is in your hands.

TABLE 1

U.S. Army Corps of Engineers Section 404 Permit Activity

	1976				1977				1978				1979			
	Section 10	Section 10/404	Section 404	Total	Section 10	Section 10/404	Section 404	Total	Section 10	Section 10/404	Section 404	Total	Section 10	Section 10/404	Section 404	Total
Permit Applications																
1. Applications recieved	1,569	1,128	2,965	17,668	8,936	7,174	3,822	19,132	8,539	8,967	3,037	18,683	10,205	7,171	3,581	21,058
2. Permits cancelled or withdrawn	475	1,158	709	2,844	1,857	1,237	681	3,715	1,174	1,276	650	3,100	1,009	1,077	915	3,501
3. Permits issued (Letters of Permission)	3,596 (3,368)	5,700 (36)	2,174 (5)	11,568 (11,349)	4,681 (3,258)	5,862 (38)	1,288 (8)	12,403 (11,288)	5,282 (3,811)	5,539 (58)	2,481 (8)	13,302 (12,889)	5,827 (3,216)	5,775 (8)	1,965 (5)	13,111 (11,236)
4. Permits denied	97	138	123	358	84	105	77	266	68	99	47	214	60	81	18	159
Activity Under the MOA																
1. Permits with unresolved objections forwarded to Div/OCE	8	24	8	40	6	27	12	45	5	8	25	45	18	48	5	61

SOURCE: U.S. Army Corps of Engineers Regulatory Summary Report

APPENDIX II

PERMIT APPLICATIONS RECIEVED

BY U.S. ARMY CORPS OF ENGINEERS

SOURCE: U.S. Army Corps of Engineers
Regulatory Summary Report

89—28—O 666-16

ESTIMATED ANNUAL SAVINGS TO PERMIT APPLICANTS RESULTING FROM PROJECT REVIEW MODIFICATIONS

	Number of Permits FY 80	Total Financial Cost ($millions)	Benefit Coefficient a[1]	Benefit Coefficient b[2]	Amortization Factor[3]	Annual Benefits ($millions) a	Annual Benefits ($millions) b
Commercial	6,320	158,810	.00563	.01125	.1107	98.9	197.8
Individual	9,821	2,882	.00563	.01125	.1107	1.8	3.6
Government	2,798	55,927	.00563	.01125	.1107	34.8	69.7
TOTAL	18,939	217,619	.00563	.01125	.1107	135.5	271.0

[1]Assumes site development costs represent 25% of total project cost; 15% of projects are benefited; benefit represents a savings of 15% of site development costs. (.25 X .15 X .15 = .00563)

[2]Same assumptions as in 1 above, except assumes 30% of projects are benefited. (.25 X .30 X .15 = .01125).

[3]Assume projects' social value is amoritized at 10% for 25 years.

SOURCE: Impact Analysis of the Corps Regulatory Program (DRAFT) Prepared by the Institute for Water Resources.

APPENDIX IV

WETLAND VALUES

I. Wetlands and Water Quality

- Wetlands are excellent at reducing biological oxygen demand (BOD) of wastewater or polluted discharges. BOD levels decreased from 49.3 ml/l to 5.3 ml/l in effluent pumped into a wetland in Massachusetts (Yonika and Lowry, 1978) with similar results reported in other studies (Hartland-Rowe & Wright 1975, Siedel 1976 deJong 1976.)

- A naturally low pH wetland in northern Michigan accommodated the discharge of a high pH effluent such that pH fell to natural levels withn 10 meters of the discharge site (Tilton et al. 1977.)

- Wetlands remove heavy metals from water by trapping them in the sediments and, to a lesser degree, by plant uptake. (Kadlec 1981, Boyt et al. 1977, Banus et al. 1975, Carriker and Brezonik 1975.)

- Wharton (1970) studied Mountain Creek, a tributary of the Alcovy River in Georgia. The creek was polluted with human sewage and chicken offal. After traveling 2.75 miles through the Alcovy River Swamp, the water was designated as clean by the Water Quality Control Board. After seven miles, the water quality was termed excellent. Wharton estimated the value of the 2,300 acre Alcovy River Swamp for water pollution control at $1 million/year.

- In Sumpter County, Florida, a 500 acre cypress-gum swamp has been used for 19 years as Wildwood's (pop. 2,500) sewage treatment facility. Tertiary treatment benefits were estimated at $80,000/year in 1974 (Wharton 1981.)

- Currently, 93 wetlands, principally cattail marshes, in Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin receive the discharge from wastewater treatment facilities. Three additional wetlands have been specifically designed for use in treating wastewater. (Brennan and Garra 1981.) Such use is anticipated to increase in the future.

- The importance of wetlands is especially clear when one considers that the United States and Canada are both experimenting with development of <u>artificial</u> cattail marshes for wastewater treatment. (Wile et al. 1981, Brennan and Garra 1981, Spangler et al. 1976.)

- Wetlands are capable of removing nitrogen and phosphorous from nutrient enriched waters such as agricultural runoff (Nutrient enriched waters are a prime cause of eutrophication of lakes in agricultural areas). Nitrogen is used directly by the plants and removed through fixation by algae and bacteria. Nitrates are dentrified in the wetland soil and sediments. Phosphorous is also taken up by plants and bound in the soil sediments. (Table 1, page D-11) (Kadlec 1981, van der Valk et al. 1979, DeLaune et al. 1978.)

- Kissimmee River canal has been cited as a major factor in the accelerated eutrophication of Lake Okeechobee, a major source of water for southern Florida. The original Kissimmee River flowed 100 miles through 45,000 acres of wetland, acting as the pollution filter for the lake. (Univ. Miami 1972.)

- Some localities have used the sediment trapping function of wetlands to their advantage. A report from the U.S Army Engineer Waterways Experiment Station, by Lee et al. (1975) discusses the use of marsh vegetation to filter and remove suspended solids from dredged material. In Georgetown, S.C., when dredge spoil was flushed onto 20 hectares of wetlands, effluent leaving the wetland site was as clean and sediment free as the river system it was entering. In another site near Pennville, New Jersey, passage of slurry through a wetland area resulted in effluent with negligible turbidity.

- Wharton (1970) estimates the economic value of Georgia's Alcovy River Swamp as a sediment accretor at more than $3,000 annually. He points out that this value would be wiped out by channelization, a threat to riverside wetlands in every part of the country.

- Wetlands remove 60-90% of the suspended sediments in waters which flow through (Tchobanoglous & Culp 1980). Flow rates are decreased and vegetation promotes fallout of suspended particles. Removal of organic sediments reduces turbidity and Biological Oxygen Demand, thereby enhancing water quality. The saltwater in estuaries further enhances sediment removal by floculation of clay particles. (Boto and Patrick 1979.) This sediment settling function helps reduce siltation problems in reservoirs, rivers, and harbors.

II. Wetlands and Flood Control

- A study of Wisconsin watersheds concluded that flood flows are 80% lower in basins consisting of 40% lake and wetland areas than in basins with no lakes or wetlands and sediment yields are 90% lower. (Novitzki 1979.)

- Chandler and Doyle (1978) reported that the runoff from hurricane rains of August 1955 was distributed over a month in the Charles River Basin with a drainage area of 477 km^2 and 3,400 ha of wetlands. Runoff lasted only a week in the adjacent Blackstone River which has a drainage area of 360 km^2 but few wetlands in the basin. The Charles River basin stored approximately 61,000m^3 of storm water which is equivalent to the average capacity of a Corps of Engineer reservoir in New England.

- The U.S. Army Corps of Engineers (1971) determined that the protection 8,422 acres of wetlands in the Charles River basin in Massachusetts (near Boston) prevented flood damages of at least $3,193,000 annually assuming that 40% of the wetlands in the basin would be converted to non-wetland uses by the year 2000 without implementation of the plan. The loss of the entire 8,422 wetland base would produce average annual flood damages of $17,084,606. Thibodeau and Ostro (1981) estimate that each acre of wetland protected under this plan is worth $2,002 per year for flood damage reduction alone. They calculate the present value of one acre over time to be $33,370. (Table 2, page D-12.)

- Hubbard (1981) summarized 95 scientific papers on the hydrologic values of prairie potholes including flood control and groundwater relationships.

- Schueler (1981), in describing the values of bottomland hardwood river systems in the deep South, asserts that the bottomland forest wetlands can retain up to 16 times their biotic weight in flood waters.

- A highly publicized report of wetlands storage in Northern Minnesota and North Dakota in the Red River basin shows that wetlands significantly reduce flood levels in major metropolitan areas downstream. The study analyzes the value of protected wetlands in the Thief Lake Wildlife Management Area and the Agassiz National Wildlife Refuge and demonstrates that during the flood of 1979, these wetlands reduced flood peaks in Crookston, MN and Grand Forks, ND by 1.5 and 0.5 feet respectively. (U.S. Fish and Wildlife Service 1980.)

III. Wetlands and Groundwater Recharge

- Mulica and Lasca (1975), emphasize the importance of Cederburg Bog in southeastern Wisconsin in supplying water to a growing suburban area outside Milwaukee. The 5 square mile wetland controls groundwater supply for an approximately 165 square mile area. The authors warn that increasing runoff associated with urbanization will affect the quality of the region's groundwater. In addition, new development within or adjacent to the bog which causes increased withdrawal of groundwater, but decreases the area available for recharge, will eventually result in a decline of groundwater and surface water levels affecting the entire 165 square mile region.

- Many groundwater aquifers in Massachusetts are fed by wetland recharge. Thompson (1970) demonstrates that wetlands in the Ipswich River basin in Massachusetts recharge groundwater supplies. Gupta and Foster (1975) and Thibodeau and Ostro (1981) have attempted to quantify the value of Massachusetts' wetlands for water supply. They estimate that the water supply function of wetlands is equal to the difference between the cost of wetland fed wells and the cost of providing water from the next best source. In Massachusetts' Charles River basin, the alternative to using well water is purchasing water from the Metropolitan District Commission, a regional agency which maintains reservoirs and sells the water to muricipalities. Comparing estimates of obtaining well wat r that could be supplied by one acre of wetland recharge (based on Cederstrom 1970) and the cost of water from the Metropolitan District Commission (1980 prices), the resulting savings from well water is about $16.50 per day, or $6,044 per year. Using a discount rate of 6 percent, the present value of this one acre of wetland for groundwater recharge is $100,730. Thibodeau and Ostro point out that, "[t]he towns in eastern Massachusetts have begun to experience water shortages which promise to become more severe. It is quite likely that water pumped from beneath wetlands will be used even more extensively than it has been in the past."

IV. Wetlands and Wildlife

- Of 276 threatened and endangered species, 80 species are highly dependent on wetlands for survival. (U.S. Fish and Wildlife Service 1980.) (Table 3, page D-13.)

- In Colorado, 90% of the state's 800 species of fish and wildlife depend on riparian habitat. In Arizona and New Mexico, 40% of these state's wildlife do. Nationally, 80% of America's breeding bird population and 15% of our fish

species require bottomland hardwoods for survival. In Missouri, loss of riparian habitat to channelization resulted in an 80% decline in fish harvests over 16 years. (U.S. Fish and Wildlife Service 1980.)

- Pocosins also support several endangered and threatened species. The bogs and surrounding land are habitat for the American alligator, pine barrens tree frog, red cockaded woodpecker and eastern cougar. Endangered plants occupy these wetlands, including spring flowering goldenrod, whitewicky kalmia, and rough-leaf loosestrife. Clearly, pocosins are valuable as remnants of a unique wetland ecosystem. (Postel 1981.)

A. Hunting

- Deer rely heavily on wetlands wherever they occur. Bottomland habitats support about 1 deer per 5-15 acres as opposed to 1 deer per 35 acres of upland habitat. (Hall 1979.)

- Originally, Louisiana supported an estimated deer population of 280,000 on 5.5 million acres of bottomland hardwoods. By 1969, clearing operations had reduced bottomland acreage to approximately 2.5 million acres, causing a reduction in the potential carrying capacity to about 126,000 deer. Yancy (1970) estimates that by 1985, the destruction of bottomland hardwoods will reduce the deer herd to approximately 31,000. In terms of dollars, the reduction in recreational potential for deer hunting will have declined from a possible 1 million man-days in 1968 to only one-quarter million man-days in 1985. This reduction in recreational deer hunting opportunities creates devastating economic effects, reducing the potential deer hunting expenditures in 1968 of nearly $10,000,000 to only $250,000 by the year 1985. Yancy presents a similar reduction in populations of fox and gray squirrel, with concurrent declines in small game hunting expenditures. (Yancy 1970, Hall 1979).

- With reductions in wetland habitats similar to those experienced in Louisiana occurring nationwide, the economic benefits of recreational hunting may proportionately decline. A 1975 survey by the U.S. Fish and Wildlife Service shows that 20.6 million Americans hunted in 1975, participating in more than 478.6 million man-days of hunting, and spending $5.8 billion for their hunting activities (Table 4, page D-14). Of these, 8.3 million Americans hunted migratory waterfowl, and spent $949 million for this entirely wetland dependent activity. (Table 5, page D-15).

- 60-70% of the lower 48 state's waterfowl population reproduce in the prairie pothole region. Virtually all of the nation's wood duck population requires bottomland hardwood for survival. (Jantzen 1981.)

- There is a great deal of evidence pointing to the importance of the prairie pothole complex to breeding waterfowl. Studies have shown that " . . . breeding populations strongly correlate with the number of wetlands present in the spring months." (Jantzen 1981.) Also, ". . . maximum waterfowl production in the pothole country results from the interrelation of a number of different pothole types, each fulfilling certain needs of the population." (Dzubin 1969.) Nevertheless, rapid drainge and conversion of prairie wetlands for crop production continues.

- Over an annual cycle, waterfowl, particularly migratory species, utilize a diverse and widely distributed series of wetlands. Moreover, at any phase in the annual cycle, especially during the reproductive season, waterfowl may utilize or even require a diverse group of closely associated wetlands. (Flake 1979.)

- Wetlands over the entire continent serve a multitude of habitat needs as waterfowl progress from one stage of the biological cycle to the next. Birds which utilize prairie potholes during the breeding season require wetlands further south for wintering. Approximately 2.5 million mallards--over 20 percent of the U.S. population of these birds--winter in the bottomland hardwood region. About 50 percent of our wood ducks and 55 percent of our woodcock utilize the bottomlands as wintering habitat (Jantzen 1981). Waterfowl also winter further south, exploiting a broad array of wetland types, including estuaries, swamps, and freshwater marshes in the East, and riparian habitats in the West.

- Thibodeau and Ostro (1981), using two models originally developed by Hammock and Brown (1974), try to account for the value of hunting which is not valued through the market place. The first approach estimates the cost that a sportsman would be willing to pay to buy the right to use the wetlands resources. Using USFWS survey information on hunting activities in the Charles River Basin in Massachusetts, Thibodeau and Ostro determine that the maximum a hunter would pay for the right to use an acre of wetlands for one year is $187.74. This means that the wetland has a capitalized present value of $3,130 per acre. The second approach assumes that sportsmen already have a right to hunt. This assumption would be realistic in areas where nearly all of the available hunting land is

in public ownership. Using further data from the same USFWS survey, hunters would be much less willing to sell their hunting rights--hunters in the Charles River Basin would charge an average of $3,366 per acre per year for their right to hunt. The present capitalized value of that acre is $56,100.

- Hammock and Brown (1974) note from their survey of hunters in the seven western states of Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington that:

  > The question dealing with willingness to sell provoked a highly emotional response in many individuals, as they objected to even the thought of selling their right. The percentage who wrote that they would not sell their right at any price was 12.4 and the percentage who named a very high figure such as one million dollars was 1.4 percent. Eliminating these responses, the mean value (for one season of hunting) was $1,044 (1969 dollars).

  The Hammock and Brown survey of western hunters showed a willingness to pay on the part of the these hunters of $247 (1969 dollars).

- The USFWS (Jantzen 1981) reports that wetlands in coastal Louisiana support 40 percent of the nation's yearly fur harvest. Over 3.2 million pelts, mostly muskrat and nutria, worth more than $24 million were harvested during the 1976-77 trapping season. The USFWS estimates that if current trends of wetland loss in coastal Louisiana continue, the fur harvest could decline by 35 percent by the year 2000. (Jantzen 1981.) The American Fur Association (pers. comm. 1981) reports that in 1980, the wetland fur harvest nationwide was worth more than $1 billion.

- In addition to fur, Louisiana allows a commercial harvest of alligators. In 1979, over 16,000 alligators worth about $1.7 million were harvested in the Louisiana coastal region. (Jantzen 1981.)

C. Fishery

- Of 2100 native fish species in U.S., 400 are important to commercial and sport fisheries, most of the other 1700 species are associated with harvest species as either prey, predators or competitors. Most of these species depend on the estuarine zone for survival. (Clark and Clark 1979, Bryan 1973.)

- Most of the important commercial and sport fish and shellfish are dependent on estuaries for at least some of their life history stages. Two-thirds of the cash value of species harvested off the Atlantic and Gulf Coasts are estuarine-dependent. (McHugh 1966.) (Tables 6, 7, and 8, pages D-15, D-16, and D-17.)

- The 1975 National Hunting and Fishing Survey reports that 53.9 million Americans fished in 1975. They participated in more than 2.3 billion days of fishing, or an average of 24.5 days per angler, and spent $15.2 billion for fishing activities for an average of $282 per anger ($11.50 per fishing day). Broken down, these expenditures totalled $7.48 billion for warm water anglers, $2.93 billion for cold water anglers, $3.45 billion for salt water anglers, and $1.06 billion for sea-run anglers. (U.S. Fish and Wildlife Service 1977.) (Table 9, page D-18.)

- Smith (1981) reports that since the early 1960's striped bass populations have declined by more than 60 percent and spawning chinook salmon have declined by more than 50 percent in California's San Francisco Bay. Smith attributes this loss to the 75 percent decline in marshland in San Francisco Bay and to the severely polluted water entering the Bay system--about one of every seven gallons of freshwater that flows into the Bay is sewage.

- On the Atlantic and Gulf coasts, the Department of Commerce has estimated that from 66 to 90 percent of the commercially important fish and shellfish species depend on coastal marshes or estuaries for at least part of their life cycle. These coastal areas provide the food, spawning grounds, and nursery areas that are important to maintain fisheries resources. Nationwide in 1979 the commercial marine fishing harvest (including foreign catches) was 9.9 billion pounds of seafood with a total retail value of $7.8 billion--a major part of this catch was dependent on estuaries for at least part of their life cycle. (Tables 10 and 11, pages D-20 and D-21)

- The South Atlantic and Gulf Coasts alone produced 2.6 billion pounds of fish worth more than $2.6 billion, retail. Approximately 88 percent of the South Atlantic and Gulf Coast harvest were estuarine species. (Jantzen 1981.) (Table 12, page D-21)

- The coastal waters of the United Stats hold great potential fo. aquaculture, which uses the marsh as a renewable resource but retains it in a natural state that is self-sustaining. Coastal estuaries have the potential to support far greater oyster production. "The annual return for oyster culture development would place the value of an acre of marsh-estuary at $12,600; $31,500; and $122,500 for increasing intensities of oyster culture." (Gosselink et al. 1974.) (Table 13 and 14, pages D-22 and D-23.)

- In Minnesota aquaculture yields of 700 lbs./acre of trout and 350 lbs./acre of sunfish and catfish have been achieved under moderate pond management. The gross value of these yields range from $1,050-$4,200/acre. (Murnyak & Murnyak 1981.)

- In Alaska alone 24,000 people (25% of work force - 1978 figures) are employed in the salmon fishing industry and sport fishing for salmon contributes millions of dollars to the local economy. Salmon require pristine streams and wetlands for spawning and survival of young. (Merrill & Koski 1979.)

- In 1970, for every acre of estuary destroyed, 535 pounds of fishery products worth $214 were lost. At 5%, the capital value of an acre of estuary equaled $4,280 in fish products. (Bryan 1973.)

- Postel (1981) reports that pocosin wetlands in North Carolina absorb and store fresh water, releasing it gradually into surrounding estuary, thereby stabilizing salinity levels. Many estuarine dependent fisheries species, especially in immature stages, are highly sensitive to changes in salinity, especially shrimp and flounder. According to Richardson et al. (1981), nearly 33 percent of North Carolina's pocosins were totally converted to non-wetland uses between 1962 and 1979. Another 36 percent may be classified as "in-transition" (drained, cleared, cut, or planned for alternative development by their owners). Assuming that the loss of pocosins would drive the total shrimp catch to its lowest recorded level during the period 1959-1978, Postel estimates that the total annual loss to the local economy would range from $2.2 million to $2.5 million.

- Craig et al. (1980) estimated the economic effects of wetland loss on the fishing industry in Louisiana. Using the work of Turner (1977) and McHugh (1966) on the relationship of commercial fishiers to wetland acreage, they conclude that higher yields are associated with larger areas of wetlands, and only incidentally associated with water surface area and volume. Based on 1973 fisheries landings of $82 million and a loss of 2.6-5.2 percent of the total wetland area, Craig et al. (1980) estimate that "$2.1-4.3 million is lost annually due to previous wetland destruction." In addition, for each dollar spent on fisheries directly, approximately $3 are spent indirectly. This multiplier effect means that the cumulative economic impact of Louisiana's coastal wetland loss on the fisheries industry is a minimum of $8.5-$17.1 million annually. This value will significantly increase unless current trends are reversed. Marshes off the coast of Louisiana are dissappearing at a rate in excess of 40 square miles per year.

- Estuarine dependent shrimp and menhaden accounted for over 95% of the commercial fishery yields in Louisiana's $200 million fishery harvest (dockside value) in 1978, which was worth over 3.25 billion after processing. (Louisiana Senate et al. 1980.)

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APPENDIX V

WETLAND LOSSES AND TRENDS

I. NATIONAL

- Barely more than half the original wetland acreage remains. In 1971, there were roughly 70 million acres. Since the mid-1950's, an average of more than 600,000 acres of wetlands has been lost each year. (2)

- In the United States, coastal marshes have been disappearing at a rate of about one-half percent per year. One million acres of coastal marsh have been lost since 1954, as documented by high altitude aerial photography of the coast. By the year 2000, if the present rate of marsh loss continues, an additional one million acres will have disappeared. (7)

II. REGIONAL

- Originally, most of the 24 million acre Mississippi Delta was forested; however, in 1937, there were only about 11.8 million acres of bottomland forests. By 1977, there were only 5.2 million acres left. These acres consist of about 3.1 million acres of seasonally flooded woodlands (commonly known as hardwood bottoms) and about 2.1 million acres of wooded and shrub swamps (commonly known as cypress/tupelo sloughs and brakes). (16)

- Only about 20% of the bottomland hardwood habitats along the Lower Mississippi remain today. They have been altered at a rate averaging more than 200 square miles per year between 1932 and 1977. The bottomland hardwood wetlands overwinter 2.5 million of the 3 million mallards of the Mississippi Flyway. Nearly 100 percent of the 4 million wood ducks of the Mississippi Flyway overwinter in bottomland hardwoods. (1)

- Between 1959 and 1977, loss of 1.25 million acres of riparian habitat in Arkansas, Louisiana, and Mississippi was attributed to Corps of Engineer projects. (4)

- Wetland drainage is occurring at a rate of about 15,000 acres per year in Minnesota, 20,000 acres per year in North Dakota, and 13,000 acres per year in South Dakota. (9)

- Of all original riparian ecosystems in the U.S., more than 70% may already have been cleared. (17)

- Less than 10% of original riparian habitat persists along the Colorado River. (17)

III. STATE

- Some states lost 95 percent or more of their original marshes. Few could drive across Iowa today and think that it once had 1,196,392 acres of "swamplands" granted to the state for "reclamation." Less than 70,000 acres remain, mostly in state ownership . . . Grant Lakes marshes have decreased by 71 percent. Southwestern Wisconsin had lost 61 percent of its marshes by 1968; Iowa and Illinois losses probably were close to 95 percent on statewide bases; Michigan was losing 6,500 acres per year in 1978; a small segment of North Dakota lost over 10 percent of the remaining wetland from 1966 to 1980. (18)

- In the Southeast, where bottomland hardwoods and wildlife were once so productive, there was a 53% loss of riparian habitats in Arkansas and a 32% loss in Mississippi in just 25 years prior to 1970. (18)

- Arkansas has lost half of its wetlands. (2)

- California has less than 450,000 acres of its original 3.5 million acres left. (1)

- At the current rate of loss, Connecticut will have only 14% of its 1914 marshes by the year 2000. (1)

- South Florida has lost a fourth of its wetlands in the past 20 years. (2)

- Iowa has lost 99% of the original glacial wetlands. (5)

- Louisiana has lost 486,000 acres of fresh marsh (54% of the state's total fresh marsh) during the past 25 years. (15)

- The total rate of land loss for brackish marsh across the state (Louisiana) is 1,366 ha/yr., 701 ha/yr. for saline marsh, 499 ha/yr. for fresh marsh, and 223 ha/yr. for swamp forest. (3)

- Currently, coastal Louisiana marshes in the Mississippi Deltaic Plain are changing to open water at the rate of about 40 square miles per year. These coastal wetlands winter 20 to 25 percent of the North American puddle duck population, a large portion of the Mississippi Flyway's diving ducks, and more than 400,000 geese. They produce the largest fur harvest ($124 million/yr.) in North America, and support the largest commercial fishery harvest (1.7 billion pounds of fish and shellfish in 1978) and recreational fishery ($35 million/yr.) in the nation.(1)(12)

- Coastal marshes losses in Louisiana's Cheneir Plain are estimated at 7.7 square miles per year, making Louisiana's total coastal marsh loss approximately 47.7 square miles each year. (12)

- The rate of loss of Louisiana's coastal marshes has increased significantly over the last 70 years. In 1973, the rate of loss was 6.7 square miles per year. In 1974, the rate of loss had increased to 15.8 square miles per year, the 1967 loss rate was 28.1 square miles per year and in 1980 the rate of loss was 39.4 square miles. Today the rate is approximately 47 square miles per year. (6)

- Only a tenth of Missouri's wetlands remain. (2)

- 17% of the riparian habitat in Missouri was lost by 1880, 40% by 1920, and by 1975, only 4% remained. (10)

- Surveys disclosed that the Rainwater Basin in South-Central Nebraska had lost over 80 percent of its marshes by the 1960's. (8)

- Nearly 33% of North Carolina's pocosin wetlands were totally converted to non-wetland uses between 1962 and 1979. Thirty-six percent of the original 2.24 million acres of pocosin area may be classified as in transition (drained, cleared, or cut, or planned for development by their owners). Only 31%, or 695,000 acres still exists in its natural state. (14)

- 70% of the original wetlands found in Oklahoma have been lost. (11)

- Coastal Texas has lost over 600,000 acres of wetlands to dredge and fill activities. (7)

- Southeastern Wisconsin had lost 61 percent of its marshes by 1968. (13)

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Texas Environmental Coalition

P.O. BOX 1683
AUSTIN, TEXAS 78701
512/478-1264

STATEMENT BY SHARRON STEWART, TEXAS ENVIRONMENTAL COALITION COASTAL RESOURCES CHAIRMAN

BEFORE THE UNITED STATES SENATE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION ON S.777, JULY 29, 1982

Mr. Chairman and Members of the Subcommittee:

I am pleased to speak today on behalf of the Texas Environmental Coalition as their Coastal Resources Chairman. The Coalition is a broad, diverse group of environmental, business, civic, labor and professional organizations as well as individuals, representing over 300,000 Texans. Due to our diversity, all positions expressed for the Coalition are the positions of the Board of Directors.

The consequences of enactment of S.777 can be estimated in a number of ways which include actual reduction in area of Sec. 404 jurisdiction, the financial impact of such reduction, the realistic potential for destruction of wetlands that are in some manner protected under current 404 jurisdiction, and the implications of the proposed amendment relative to future water quality and fish and wildlife considerations.

The proposed reduction in 404 wetland jurisdiction, on a national level, considering Phase I, II and III waters, is large, though difficult to accurately define. It is large because Phase II and III waters under-current jurisdiction represent approximately 85% of the total 148 million acre area

of wetland jurisdiction, and it is difficult to define accurately because the mean high water line in wetlands "adjacent" to navigable waters in coastal areas is not readily establishable.

We do have some estimates for the area of coastal wetlands in Texas that would be removed from Sec. 404 jurisdiction by a proposal such as that in S.777 that have been prepared by the Texas General Land Office. Assuming that the mean high water line would encompass some 30% of "adjacent" wetlands (coastal marshes) into the navigable water unit, 91.6%, or 378,000 acres of Texas coastal wetlands would be removed from protection under Sec. 404. If 100% of the coastal marshes, as defined by their dominant vegetation type, were included in the amended Sec. 404 jurisdiction, some 74.4%, or 307,000 acres of the coastal wetlands in Texas would still fall outside Sec. 404 jurisdiction, and most would be virtually without regulatory protection under federal or state law, since more than half, and possibly up to 70% of the effected wetlands are in provate ownership. The uncertainty in the area of public ownership is not unusual in coastal states, given the complexity of determining the legal boundaries of public lands in coastal areas (see attached report).

The financial impact of this proposed reduction in Sec. 404 jurisdiction is assignable to numerous sectors. The Findings (Sec. 1) of S.777 assert that "needed" developments have been "delayed" under current law "without commensurate benefit to the nation". The costs of "delays", undeniably are substantial as compared to a situation in which there is no regulation. The "delays" due to the asserted non-beneficial administration of existing law have been found insubstantial, by interpretation of the information collected by the Bush Task Force, when compared to the "horror stories" spread by developers disgruntled at having to subscribe to any regulatory system that limits their free depletion of renewable natural resources.

The facts regarding delays attributable to existing law in the Findings of S.777 do not substantiate the need for legislative remedy. The Bush Task Force reports that of the

over 100,000 actions annually affected by the Corps of Engineers' regulatory program, 90% are processed under provisions of "general permits". Our experience in processing of general permit activities in the Galveston Corps District is that response can be secured regarding the proposed activity within a period of approximately 3 to 21 days. Of the 18,000 applications that require individual action by the Corps under Sec. 404 and/or Sec. 10, 43% are for Sec. 10 permits (our observation is that these rarely run into delays other than application form errors), and 40% are for Sec. 404/10 permits. The remaining 17%, or about 3000 of the applications are for Sec. 404 permits. Over 70% of the permits, according to the Bush Task Force, were processed without "delay", defined by the Task Force as processing times in excess of 120 days. The remainder experienced difficulties that ultimately led to delay costs that the Task Force, by "very rough" estimate, stated to be in excess of $1.5 billion annually. It appears that these costs were calculated to accrue from idled sunk capital, interim price increases, and reduced expected return on investment based upon the project lifetime, the last of which is a hazy projection at best, and probably represents the largest portion of the estimated cost. The "delay cost" can also be viewed to be of reduced significance if it is considered that it applies largely to a very few applications for large projects of a nature that would make them controversial under any regulatory regime that examined their destructive impact on natural resources. And, many of these, if they are port, or port-related projects, would experience no relief, should the provisions of S.777 be adopted.

The financial benefits of wetlands protection afforded under Sec.404 are many and have been recited to this and other committees many times. The renewable resource values attributable to wetlands of just a few areas of interest easily overshadow the "delay costs" when dollar values are attached to such wetland benefits as water purification, flood control, fisheries production and waterfowl habitat.

The proposed S.777 would, in Texas alone, leave on the order of 300,000 acres of coastal wetlands essentially without

regulation. We have no good figures for the additional area of Phase II or III waters that would be impacted. It is important, also, to recognize that these wetlands that would no longer be under regulation in the coastal area are, to a large extent in the estuaries that support the water quality and habitat attributes which provide for the protection and propagation of fish, shellfish and wildlife, and provide for recreation in and on the water, a primary goal of the Federal Water Pollution Control Act.

CONCLUSION AND RECOMMENDATIONS

In our view, Sec. 404, as written, is appropriate to the goals of the Federal Water Pollution Control Act and requires no amendment. The Findings of S.777 are sufficiently broad to condemn virtually any body of regulation that addresses the protection of the Nation's natural resources, and they certainly are not of a nature that would compell such a sweeping and dangerous policy amendment as is proposed by S.777.

We do agree that instances can be found where the administration of Sec. 404 resulted in unnecessary delays for a permit applicant. But, the Bush Task Force, combing the history of the administration of Sec. 404 did not turn up substantial information to verify the assertions of many developers that Sec. 404, as written in the Act, is operating contrary to the best interests of the nation, nor did the Task Force find information that the goals of the Federal Water Pollution Control Act are in any way flawed, or in need of revision.

The agencies responsible for administration of Sec. 404 have reported that they are seeking means to better administer the 404 permit system, and we see this as a worthy aim. But, we caution them to be sensitive to the spirit and goals of the Act, and, in their zeal for reform, to not overlook the significant policies of the Nation regarding the intent to maintain and enhance the quality of the waters of the United States.

It does appear that the agencies, even with manpower reductions, are capable of reducing the processing time required for many individual permits, and they should be encouraged to continue in this effort. The mechanism of issuance of general permits is producing satisfactory results, and its further use in appropriate situations will certainly serve to reduce the time necessary for securing permits in non-controversial situations. In addition, from our own experience, we encourage the voluntary participation of agencies and applicants in pre-application conferences, and the agencies should better publicize the availability of this practice. The practice should not be mandated, in our opinion, because it would probably then lead to a new level of administration requiring rules of procedure, etc., and the applicants may feel the need to solidify positions in advance of a formal conference that could actually increase the potential for delay in the permit process.

We are also of the opinion that if the reviewing agencies were afforded funds for expanded research programs, in the long run, they could reduce their review time requirements by encountering fewer applications that required individually directed research in order to respond in accordance with their statutory mandates.

Thank you. I will be pleased to answer your questioms.

STATEMENT

DELEGATE RON DE LUGO

Concerning Environmental Relief For Rum Industry In The Virgin Islands

BEFORE THE

Subcommittee on Environmental Pollution

Of The Senate Committee On

ENVIRONMENT AND PUBLIC WORKS

JULY 29, 1982

Mr. Chairman, it has now been more than five years since I first called the attention of this subcommittee to the problem of enforcement of the Federal Water Pollution Control Act in the Virgin Islands. I am sorry that the Environmental Protection Agency has yet to grant us relief from this problem.

It is difficult to overstate the important economic and social role played by the rum industry in the Virgin Islands. Rebates of federal excise taxes imposed on Virgin Islands rum sold in the United States provide the single largest source of revenue to the Virgin Islands Government -- $37.1 million in 1981. In recent years these rebates -- constituting about 15% to 18% of total territorial government revenue -- have provided essential financing for government operations and numerous development projects. About 3% of the Territory's total local manufacturing jobs are in the rum industry.

The biodegradable effluent produced by rum distilling operations is currently discharged through an outfall into the oxygen-rich waters of the Caribbean Sea off the south shore of St. Croix, where it is rapidly assimilated without causing environmental harm. Local environmental authorities are in agreement on the benign nature of this effluent, and are concerned only about the temporary discoloration to the ocean water caused by the effluent prior to its dispersion. This concern could be addressed quickly and economically by the addition of diffusion equipment. Despite the general consensus that water quality off of St. Croix is not being

HARMED BY RUM EFFLUENT DISCHARGES, EPA HAS, TO THIS POINT, INSISTED UPON THE CONSTRUCTION OF A WASTE TREATMENT FACILITY THAT WOULD CONTRIBUTE TO AIR POLLUTION AND POSSIBLY EVEN CREATE A SOLID WASTE DISPOSAL PROBLEM WHILE DOING NOTHING TO ENHANCE THE QUALITY OF THE RECEIVING WATERS. THE CONSTRUCTION OF SUCH A FACILITY -- WHICH WOULD BE EXTREMELY COSTLY TO BUILD AND OPERATE -- IS SUPPOSEDLY JUSTIFIED BY A NUMBERS GAME IN WHICH EPA PLACES A PRIORITY ON THE REDUCTION OF THE EFFLUENT'S OXYGEN ABSORBING CAPACITY, TO THE EXCLUSION OF CONSIDERATION OF FACTORS OF COST OR EVEN OTHER ENVIRONMENTAL IMPACTS. THIS NUMBERS GAME IGNORES THE FACT THAT THE WATERS OF THE CARIBBEAN SEA ARE FULLY CAPABLE OF SUPPLYING THE OXYGEN TO PROMOTE THE BREAKDOWN OF THE EFFLUENT IN ITS PRESENT STATE WITHOUT HARMING MARINE LIFE.

AS A RESULT OF CONGRESSIONAL CONCERN OVER EPA'S ACTIONS AT THE TIME THE 1977 CLEAN WATER ACT AMENDMENTS WERE ADOPTED, THE AGENCY WAS DIRECTED TO UNDERTAKE A THOROUGH EXAMINATION OF THE SITUATION TO ASCERTAIN WHETHER UNTREATED RUM EFFLUENT MIGHT BE DISPOSED SAFELY IN THE MARINE ENVIRONMENT. EPA'S RESPONSE TO THIS DIRECTIVE WAS A STUDY THE OUTCOME OF WHICH WAS SIGNIFICANTLY INFLUENCED BY AGENCY ENFORCEMENT DIVISION PERSONNEL WHO HAD ALREADY FORMULATED THEIR CONCLUSIONS ON THE SUBJECT. THE STUDY SPECIFICALLY FAILED TO EVALUATE THE VERY DISPOSAL OPTION PROPOSED BY RUM DISTILLERS AND MERELY SERVED TO DEMONSTRATE THAT MARINE ORGANISMS CANNOT SURVIVE IN THE ABSENCE OF OXYGEN, A POINT NO ONE HAD DISPUTED. DESPITE

PENDING ADMINISTRATIVE EFFORTS ON THE PART OF RUM PRODUCERS IN THE VIRGIN ISLANDS AND PUERTO RICO TO PERSUADE EPA TO ALTER ITS APPROACH, THERE APPEARS TO BE LITTLE LIKELIHOOD THAT A REGULATORY SOLUTION TO THIS PROBLEM WILL BE FORTHCOMING. CONTINUED INSISTENCE UPON THE CONSTRUCTION OF THE TREATMENT FACILITY PROPOSED BY EPA WILL SEVERELY JEOPARDIZE THE ABILITY OF VIRGIN ISLANDS RUM PRODUCERS TO COMPETE SUCCESSFULLY IN A PRICE SENSITIVE MARKET. IT IS TIME THAT CONGRESS TAKE STEPS TO ENSURE THAT UNJUSTIFIED REGULATORY BURDENS THAT IGNORE ENVIRONMENTAL CONSIDERATIONS DO NOT CRIPPLE THE RUM INDUSTRY IN THE VIRGIN ISLANDS.

I HAVE DRAFTED AN AMENDMENT -- PRINTED AT THE END OF MY STATEMENT -- THAT WOULD ACCOMPLISH THIS END. DISCHARGES OF RUM EFFLUENT WOULD NOT BE SUBJECT TO SECTIONS 301, 306 AND 403 OF THE FEDERAL WATER POLLUTION CONTROL ACT IF THE DISCHARGES OCCUR AT LEAST 1500 FEET OFFSHORE AND IF THE GOVERNOR OF THE VIRGIN ISLANDS DETERMINES THAT THE DISCHARGES WILL NOT DAMAGE WATER QUALITY, ENDANGER HUMAN HEALTH, OR UNREASONABLY LIMIT WATER USES. THIS WOULD NOT BE A REVOLUTIONARY CHANGE IN THE ADMINISTRATION OF THE FEDERAL WATER POLLUTION CONTROL ACT, SINCE THE VIRGIN ISLANDS GOVERNMENT HAS ALREADY BEEN GRANTED AUTHORITY TO ISSUE PERMITS UNDER THE NPDES PROGRAM. BUT IT IS A CHANGE OF GREAT SIGNIFICANCE IN THIS INSTANCE, WITH RESPECT TO CONVENTIONAL POLLUTANTS (THERE ARE NOTHING BUT TRACE QUANTITIES OF "TOXIC SUBSTANCES" PRESENT IN RUM EFFLUENT), AS THIS AMENDMENT WOULD PERMIT TREATMENT LEVELS TO BE BASED ON OBSERVABLE ENVIRONMENTAL CONSIDERATIONS RATHER THAN ON BLIND ADHERENCE TO PRESUMED ENVIRONMENTAL BENEFITS ACCRUING FROM REDUCTIONS IN THE AMOUNT OF OXYGEN ABSORBED BY THE EFFLUENT WHILE IT IS BEING ASSIMILATED.

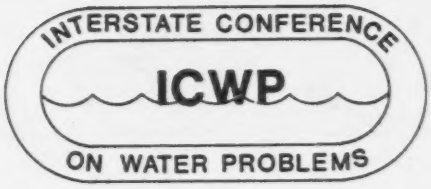
MY RECORD ON ENVIRONMENTAL ISSUES IS CLEAR, AND ONE IN WHICH I TAKE CONSIDERABLE PRIDE. NOBODY IN THE VIRGIN ISLANDS APPRECIATIES MORE THAN I DO THE NEED TO ENSURE THAT OUR ISLANDS' ENVIRONMENT BE PROTECTED. INDEED, I WOULD NOT BE BEFORE YOU TODAY WERE I NOT CONVINCED THAT ADOPTION OF MY AMENDMENT WOULD IN FACT BE MORE BENEFICIAL TO AIR AND WATER QUALITY IN THE VIRGIN ISLANDS THAN WOULD ADHERENCE TO THE TREATMENT REQUIREMENTS WHICH EPA HAS BEEN ATTEMPTING TO IMPOSE. I URGE THIS SUBCOMMITTEE TO ACT TO ENSURE THAT COMMON SENSE AND GOOD ECONOMIC SENSE PREVAIL WITH RESPECT TO ENVIRONMENTAL REGULATION OF THE VIRGIN ISLANDS RUM INDUSTRY.

Proposed Virgin Islands Rum Discharge Amendment

Any discharge from a point source in the United States Virgin Islands in existence on the date of the enactment hereof which discharge is attributable to the manufacture of rum (alcoholic spirits classified under item 169.13 and 169.14 of the Tariff Schedules of the United States (19 U.S.C. Section 1202)) shall not be subject to the requirements of section 301 (other than toxic pollutant discharges), section 306 or of section 403 of the Federal Water Pollution Control Act if --

(1) such discharge occurs at least 1,500 feet into the territorial sea from the line of ordinary low water from that portion of the coast which is in direct contact with the sea, and

(2) the Governor of the United States Virgin Islands determines that such discharge will not interfere with the attainment or maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities, in and on the water and will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity, or teratogenicity), or synergistic propensities.



TESTIMONY OF

THE INTERSTATE CONFERENCE OF WATER PROBLEMS (ICWP)

Presented by

A. KENNETH DUNN

DIRECTOR

IDAHO DEPARTMENT OF WATER RESOURCES

MEMBER, BOARD OF DIRECTORS, ICWP

Accompanied by

HENRY SILBERMANN

ASSISTANT SECRETARY

MARYLAND DEPARTMENT OF NATURAL RESOURCES

MEMBER, BOARD OF DIRECTORS, ICWP

Before

THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

WASHINGTON, D.C.

JULY 28, 1982

1919 Pennsylvania Avenue, N.W., Suite 300 Washington, D.C. 20006
Telephone: (202) 466-7287

Senator Chafee, I appreciate the opportunity to appear before the Subcommittee on Environmental Pollution on behalf of the Interstate Conference of Water Problems (ICWP).

My name is Kenneth Dunn. I am the Director of the Idaho Department of Water Resources. I am here this morning not on behalf of the Department, but in my role as a member of the Board of Directors of ICWP. I am accompanied by Mr. Henry Silbermann who is the Assistant Secretary of the Maryland Department of Natural Resources and also a member of the ICWP Board of Directors.

Interstate Conference on Water Problems (ICWP)

For those on the Subcommittee who may not be familiar with ICWP, a little background may be helpful. The Interstate Conference on Water Problems (ICWP) is a national association on State, interstate, and intrastate water resource agencies concerned with water resources administration and related matters. ICWP was established in 1959 as an outgrowth of a regional conference on water problems as recognized in the same year by action of the General Assembly of the States.

ICWP, as an independent association of water agencies, works cooperatively with the National Governors' Association, the National Conference of State Legislatures, and the Council of State Governments, and serves as an advisory body to other associations of government officials in the area of water resources management, conservation, and development.

The purpose of ICWP is to facilitate cooperation, consultation, and exchange of information among State, intrastate, and interstate officials and agencies, as to the conservation, use, development, and administration of water and related land resources, and the laws governing these matters. For more than 20 years ICWP has been involved intimately in Federal-State relationships dealing with water and related resources. Its constant aim is to encourage intergovernmental cooperation, and to develop a consensus of State and intrastate views on any subject within the purview of ICWP, and to present and disseminate such views.

ICWP is managed by a Board of Directors elected annually, and reflecting national geographic distribution. Currently, Board members are from Idaho, Montana, Oklahoma, California, Ohio, Maryland, Pennsylvania, South Carolina, Kentucky, Mississippi, and Texas. The ICWP national office is located in Washington, D.C.

Court Decision

In the January 29, 1982 decision, National Wildlife Federation v. Gorsuch, the U.S. District Court (DC) held that certain dams may cause the "discharge of pollutants" as defined by the Clean Water Act. Water quality changes held to be "pollutants" included low dissolved oxygen, dissolved iron and maganese, temperature changes, and gas supersaturation.

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After considering arguments,the Court decided that discharges over, through, or around dams are "point sources." The Court ordered that EPA ". . . designate dams as a point source category under Section 402 of the Clean Water Act, establish effluent limitations or other performance standards for dams on a categorical, as opposed to a case-by-case basis; and subject existing and proposed dams to all National Pollutant Discharge Elimination System [NPDES] requirements applicable to other categories of point sources . . ."

This decision is currently being appealed by the Environmental Protection Agency (EPA). If EPA is not successful, however, there are approximately 2,300,000 dams in the United States which would require permits under the Court's decision.

The ICWP is concerned that implementation of this decision could seriously interfere with existing State mechanisms to consider water quality impacts in the construction and operation of dams; destroy the balance which must exist among water resource uses including a consideration of water quality; and create an unduly burdensome and costly administrative procedure with little environmental benefit.

Because of the serious implications on the required work effort if the states and Federal agencies, including EPA, must deal with dams as point sources of pollution, the Interstate Conference on Water Problems urges Congress to act promptly.

ICWP recommends that Congress clarify in law -- that changes in water quality caused by the carriage, storage or release or water through dams, conveyance structures, and flow diversion facilities are not point sources of pollution which require national pollution control permits.

Existing State Mechanisms: Response to ICWP Questionnaire

At the outset, it should be noted that in the absence of the NPDES permit system or effluent guidelines promulgated by EPA, the water quality problems of dams can be and are addressed by programs operated under State law. In many States, the design, construction and operation of any existing or new dam must be reviewed for compliance with all State environmental law, including State water quality standards.

In some States, such as Colorado, the State water quality law prohibits requiring a pollution control permit for the carriage, storage, or release of water from or into streams, lakes, reservoirs, or conveyance structures in the exercise of water rights. However, the State law provides that water quality standards may apply to discharges from dams when the State Water Quality Control Commission has adopted appropriate control regulations. This assures that, without requiring pollution control permits, the State can act when justified to protect beneficial uses made of its water resources, to

address specific water quality problems associated with any particular dam.

Some data from a recent ICWP questionnaire to States and inter-and-intra State agencies will illustrate this point. Sixty-six percent of the 35 States responding indicated that their State has a program (other than NPDES) which regulates the construction and/or operation of dams, which includes authority to consider water quality impacts of such construction or operation.

A number of States cited State laws which specifically provide for the regulation of water quality impacts of dams. Two examples are California and Idaho. In California, the State has authority to regulate any discharge of waste that could affect water quality. In addition, the California Environmental Quality Act (CEQA) calls for consideration of all environmental impacts of a project at the time of approval. CEQA can be effectively used to mitigate nonwaste-related water quality impacts when water rights permits are being approved.

General authority is provided by the Idaho water quality standards to regulate all activities which lessen water quality. There is a specific dissolved oxygen standard for waters below dams. The Legislature has established monitoring requirements that are enforced by the Idaho

Department of Health and Welfare. The Idaho Department of Water Resources regulates dam construction, operation and maintenance (dam safety) and also administers water rights, by which water quality concerns are considered.

Mississippi, Montana, New Jersey, North Carolina, Oregon, to name a few, have some type of State statute requiring approval of the construction, alteration, or modification of dams which includes authority for the State to require modifications to adhere to water quality standards. For a listing of State responses to this and other questions, see the summary tables in Attachment A.

Fifty four percent of the States indicated that there are standards or guidelines for the protection of water quality which are applied in the review of permit applications for dam construction. Fifty seven percent reported such standards for dam or reservoir operation. The following standards were reported as being in place: Erosion and sediment control - 57%; Aeration devices or measures - 23%; Thermal release control - 40%; Conservation release/minimum flow requirements downstream to protect water quality - 57%; and, Water quality monitoring in 42% of the States responding.

A fuller sense of the extent to which States already take water quality impacts into account is reflected in responses to the question: "Are reviews of permit applications or project proposals for dams or reservoirs coordinated

with your State water quality activities?" Seventy-nine percent of the States responding said "Yes." Eighty-one percent of the States indicated that there is also coordination with State fish and game agencies; and sixty-six percent reported coordination with the U.S. Fish and Wildlife Service.

In States such as Kansas, Georgia, Michigan, Mississippi, Nevada, New Hampshire, New York, Oregon, Pennsylvania, Vermont, Washington, Wisconsin and Wyoming, agencies concerned with water and related land development and management routinely coordinate comments on proposals for reservoir construction. This coordination includes consideration of water quality impacts and related concerns. Wherever applicable, the concerns of fish and game interests are also considered.

Although fifty seven percent of the States reported that their State water quality program does not require water quality or discharge permits for dam construction, sixty-seven percent of the States indicated that, should an existing dam or reservoir contribute to or cause pollution, it is subject to regulation and corrective action.

For example, California reported that permits would be required if water quality would be affected; and Colorado reported if dewatering occurs during construction a permit will be required with restriction relative to pH, sediment, and oil and grease. In Arizona, the Water Quality Control Council has adopted surface water quality standards and stated

that, although the problem has never arisen, it is possible that a violation caused by operation of a reservoir could be prosecuted under those rules. It is interesting to note that two States, Georgia and New Mexico, indicated that the existing dams which create any water quality problem are large and federally owned. However, many States made it clear that currently no NPDES or NPDES-type permit is required for dam construction.

What Is A Dam?

What constitutes a "dam" for the purposes of regulation? There is a wide range of definitions in State law and practice as to what constitutes a dam. Thirty-two States responded to the question: "How does your State or jurisdiction define a "dam" which is subject to regulation? Twenty-three different answers were given. A few examples follow.

The Dam Safety Act in Louisiana defines a "dam" as any artificial barrier, including appurtenant works, which does or will impound or divert water or any other liquid substance and which (1) is or will be twenty-five feet or more in height from the bed of the watercourse measured at the downstream toe of the barrier or from the lowest elevation of the outside limit of the barrier, if it is not across a stream channel or watercourse, to the maximum water storage elevation or (2) has or will have an impounding capacity at maximum water storage elevation of fifty acre-feet or more. This definition

does not include any dam or barrier that is not or will not be in excess of six feet in height, regardless of storage capacity or which has or will have a storage capacity of maximum water storage elevation not in excess of fifteen acre-feet, regardless of height .

In Indiana, in general, dams are not considered to be subject to regulations if all the following conditions apply: The drainage area above the dam is not more than one square mile (640 acres); the height of the dam from the natural stream bed to spillway level is not more than twenty feet; and, the volume of water impounded does not exceed one hundred acre-feet.

In Idaho, dam means any artifical barrier together with appurtenant works, which is or will be 10 feet or more in height or has or will have an impounding capacity of maximum storage elevation of 50 acre-feet or more. Height of a dam is defined as to the vertical distance from the natural bed of the stream or watercourse at the downstream toe of the barrier, as determined by the Director, or from the lowest elevation of the outside limit of the barrier, if it is not across a stream channel or watercourse, to the maximum water storage elevation. No obstruction in a canal used to raise or lower water therein or divert water therefrom and no fill or structure determined by the Director to be designed

primarily for highway or railroad traffic shall be considered a dam.

Some States, like Iowa, reported that a combination of height and storage standards is used to define. Another example of this is the definition used in New York, where a dam must generally control a drainage area greater than one square mile, or have a height of 10 feet, or impound more than one million gallons of water to be subject to state regulation. In Pennsylvania, any dam which is 15 feet or more in height, has a storage capacity of 50 acre feet, or has a drainage area exceeding 100 acres is subject to state regulation. In Vermont, a structure capable of impounding more than 5,000 cubic feet of water is subject to regulation.

In New Jersey, under the "Safe Dam Act" a dam is defined as any structure which will raise the water of any river or stream more than five (5) feet above the usual mean low water height. Structures of less than this height, if located on natural streams (or rivers) are also regulated pursuant to the Flood Hazard Area Control Act.

In Nevada, any dam 10 feet or greater or storing more than 10 acre feet, must have a permit from the Division of Water Resources. Any dam which is subject to city or county

construction permits is required to use Best Management Practices.

In Nebraska, absent a statutory definition, the department considers dams to be of two types: dams constructed for the purpose of (1) holding back and raising water for service to lands of a higher elevation, or (2) to create greater head for hydroelectric generation. Generally a dam is a constructed barrier designed for either purpose.

The bottom line is definitions of the term "dam" among states vary widely for the purpose of determining the need for regulation. Imposition of a single uniform definition will have significant consequences, and could result in unnecessary disruption of existing State regulatory activities and duplicative administrative practices which may produce no significant water quality improvements.

Need to Integrate Water Resources and Water Quality Considerations

The U.S. District Court ordered that control of dams be approached through categorical effluent standard and NPDES permits. If established water quality standards are, in fact, appropriate and achievable goals, they ought to be met. However, it is not unreasonable to consider some alteration of standards to achieve a reasonable balance between water uses. For example, cold water discharge, and introduced cold water fishery, has been acceptable in instances and actually preferred

to restoration of a warm water regime and associate fishery. In other instances, a release may not be in compliance, or fully in compliance, with water quality standards for the receiving stream, but the persistence of the condition may be short-lived, and therefore acceptable. Another example: low dissolved oxygen and altered temperature may recover to ambient conditions within a time period and reach of the stream and be compatible with the downstream water use.

As is well known, many of the remedies for water quality problems are costly, but cost alone should not and must not deter needed correction where significant environmental improvement can be achieved or anticipated. Yet, should there be a mandate for the imposition of management practices regardless of cost, where the environmental benefits are likely to be small and insignificant, when compared to other environmental protection efforts? We think not.

When judged in this light, ICWP finds that the categorizing of dams as point sources of pollution, subject the NPDES permitting, would add a heavy administrative and economic burden without ensuring significant water quality benefits. There is no doubt that huge expenditures of money would be required for surveys and studies, the NPDES permitting process, the requirements imposed for retrofitting, the requirements imposed for operation and maintenance, the need to report NPDES compliance and non-compliance, the administrative need

for monitoring, etc., etc., and all this-in many, many instances-without achieving real improvements in water quality.

Instead, if dams are evaluated on a case-by-case or site-specific basis, and subjected to water quality management control when it is determined that water pollution results from a project, necessary water quality protection can be achieved where needed and feasible.

New Dams And Reservoirs

Water quality protection must be considered in the planning, design, and construction of new dams and reservoirs. ICWP supports for such new projects, the use of available technology, the providing of baffles and current deflectors where appropriate, destratification techniques for smaller reservoirs, the use of floating pumping stations in certain projects, outlet structures which permit withdrawal of releases from different depths or zones, and other featurs which will make the structure a source of environmental protection and enhancement, and not a source of water pollution. Such evaluation, however, is and should be the responsibility of the individual States.

Shifting the withdrawal to a different zone is a potential solution to many of the water quality problems in release waters. The remedy to cold water discharges is to shift withdrawal to the surface waters (epilimnion) or to mix discharges to achieve a desirable temperature. While existing dams may require major reconstruction of outlet works or installation of skimming weirs to achieve this, the problem could be handled

readily in new projects. For existing dams, spillway crest gates can be operated in lieu of outlet works in some cases, but a skimming weir may be the only solution for deep turbine intakes, and it may not be successful.

Clean Water Act Strategies

The Clean Water Act provides two strategies which are applicable to this issue: 1) point source control via Section 402 or 2) nonpoint source control via Section 208. EPA prefers nonpoint source control and has prepared amendments to the Clean Water Act to accomplish this.

Point source control for dams triggers a series of predetermined and rather inflexible events: 1) categorizing dams for control, 2) establishing effluent guidelines or performance standards, 3) processing NPDES permits, and 4) enforcing permits.

In specific cases, the discharge of waters from dams can produce severe localized impacts. These can best be dealt with on a case-by-case basis. There is a real benefit in the use of our limited staff and financial resources, if we focus on the problems which are known, readily identifiable, and must be corrected.

The issuance of a permit to discharge within prescribed limits generally assumes some control over the character of the discharge itself. In the vast majority of existing dams, no such control exists at the dam site. Therefore,

the only techniques available to effect a change in the discharge are to construct at great-and possibly prohibitive-costs requisite water quality control structures, or to apply management practices to the watershed. Either alternative becomes an extreme administrative burden if it is required that all dams must be subject to NPDES permitting. (There are appoximately 2,300,000 dams in the United States which would require permits under the Court's decision). The proposed amendments by EPA would provide a feasible solution.

Dams As Non-Point Sources

EPA' long-standing interpretation that dams are non-point sources subject to State best management practices allows for responsible State integration of its water resource and water quality management programs. EPA uniform national effluent standards for dams would limit the flexibility of the States to address their own water resource concerns and to balance them against water quality issues.

It should be noted that there are two technologies that when applied to larger dams are beneficial in maintaining quality. One is the pump storage concept which recirculates and changes the relative position of each particulate every 24 hours for the most part. The second is the adequate use of rip rap below the dam discharge point, which if supplied in sufficient quantity, can help reestablish oxygen levels at least cost over time.

The major concern, though, is that by requiring the Environmental Protection Agency to establish effluent limitations and to issue NPDES permits for dams, the issue of water quality per se will become paramount, distorting the very purposes for which the dams were initially constructed, and obstructing the balancing procedures required by the National Environmental Policy Act.

Water quality and other environmental concerns are of great importance. However, reservoirs are constructed and built for other purposes such as flood control, navigation, water supply, and hydropower.

The goal should be a balanced approach to water management recognizing water quality as one of several important considerations. Water control plans must be carefully developed and implemented considering all beneficial project purposes. This process necessarily involves compromise and considerable coordination among water users to obtain the greatest public benefit from each project. Directing EPA, with the single objective of environmental improvement, to establish a permitting program for reservoir regulation could lead to distortion of other equally important water resource objectives.

Some water quality problems can be created or avoided by design elements of the dam, particularly related to spillway and outlet structures. These elements vary greatly according to the type, size, and site of the dam.

Overall the water quality problems posed by dams in large part depend on where the dam is located, upstream sources of pollution that may be concentrated in the dam, the purpose of the reservoir, its depth and volume, structural features, and its operating program. For this reason, it is extremely difficult to categorize the design, operation, or impact of a proposed reservoir, and hence to prescribe effluent guidelines or design standards that are meaningful for a particular category of facility.

Administrative Cost vs Environmental Benefit

Eight-three percent of the States responding to the question "Does your State or jurisdiction feel the dams, waters stored in reservoirs or water released from reservoirs should be subject to the NPDES permit process?" said "No"

Both Arizona and California pointed out that the State had not taken an official position at the time of the questionnaire, but that such permitting is low priority; limited resources are needed elsewhere; and, there is adequate authority to address most water quality issues under State law. Similar statements regarding adequacy of State law, the good working mechanism of the Section 401 process, and the poor cost-effectiveness of NPDES permits were made by States such as Maine, Mississippi, New Jersey, Oklahoma, North Carolina, Vermont, and Wisconsin.

The requirement of permits under NPDES would impose substantial administrative and other cost-related expenditures

on the operation of dams and reservoirs. At the least, NPDES permit limitations on the release of impounded water could interfere with the ~~diversion~~ diversion of water rights and the counteraction of the purposes for which the reservoirs were intended. For example, Colorado reported that because of water rights consideration, agencies within the Department of Natural Resources exercise primary control over releases from dams and reservoirs. State law specifically states that water releases in the exercise of water rights shall not be considered point sources. To issue permits to the approximately two million dams in the U.S., or even to any significant fraction of this number, would have profound implications for the total NPDES program nationally, and for the ability of EPA and the States to adequately regulate major dischargers to toxic pollutants. To issue permits for fifty thousand or sixty thousand of the largest dams or even for a significant portion of that number would substantially impair the ability of States to adequately regulate major discharges of priority pollutants.

The process of permit issuance for dams would constitute a crippling new workload burden for EPA and the States. EPA and the States, wherever possible, issue permits based on promulgated effluent limitations guidelines. EPA may not be able to issue such guidelines for dams in the near future. Even assuming guidelines are available to permit-issuing authorities, the workload will be enormous. EPA and the State would receive, and evaluate for completeness, applica-

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tions for between fifty thousand and two million dams. Each dam would then be assigned effluent limitations based on the applicable guidelines. The permit-issuing authority would then evaluate those limits to see if they would provide for the attainment of water quality standards. If not, more stringent limits would have to be developed on a case-by-case basis. After this technical analysis, EPA or the State would begin the process for issuance of the permit.

These estimates do not take into account the resources necessary to conduct the water quality surveys to determine whether each dam requires a permit. Neither do they take into account the time needed for evidentiary hearings. Owners and operators of dams (particularly in the West, where water rights have fundamental importance) may strongly resist any regulatory efforts perceived as affecting dam operations, and thus affecting downstream water flow. These owners and operators would thus be likely to request evidentiary hearings more frequently than normal. Evidentiary hearings can add one work-year to each permit challenged. EPA and the States are simply unequipped to assume such an immense burden.

One of the remedies suggested by the District Court decision was the use of area-wide or general permits which would cover many of these dam facilities. There are at least two potential problems which would hinder the issuance of general permits.

First, in order to issue a general permit, all of the potential permittees to be covered by a general permit must be similar in nature with similar pollutant discharges. Since the dam-created problems will vary for each dam site, general permits would be very difficult to apply. Before a general permit can be considered it will be necessary to identify all the various dam-created problems that could occur, and the potential solutions for these problems. Frequently these solutions would require case-by-case determinations of necessary changes in operation of the dam, such as water release at different water levels from the dams to control temperature and dissolved oxygen content or use of spillway deflectors to avoid supersaturation. Since the problems attributtable to the dam or the reservoir, as well as the solutions, would vary depending upon on the dam site, a general permit containing conditions and requirements for all dams to be covered by the general permit might well not be feasible.

An additional administrative problem which exists for the use of general permits is that none of the thirty three approved NPDES States has yet been approved to issue general NPDES permits. Many of these States may need to modify their State regulations and EPA-State agreements to authorize the State to issue general permits. General permits cannot be issued in approved States until these States make the

appropriate modifications and are then authorized to issue general permits.

The process of gathering and evaluating data on dams would be more complex and difficult than developing typical industrial effluent guidelines. Dams have to be examined in terms of traditional effluent limitations factors such as age, size, type or facility, and the other factors listed above. In addition, such factors as location, climate, mode of operation (flood control, power generation etc.), hydrodynamics of impounded water, biological activity in the reservoir and surrounding stream use need to be considered not only in determining control measures but even in deciding whether the dam or reservoir causes "pollution" and is therefore subject to regulation under the Court's order. For example, the appearance of low dissolved oxygen conditions depends significantly on the presence of oxygen-demanding substances in the reservoir. The size and type of dam does not determine what the loadings of oxygen-demanding substances will be in the reservoir. The land use patterns upstream from the dam and the biological activity in those upstream water are among the critical factors determining such loadings.

Moreover, dams play a crucial role in allocation of water rights under State law, particularly in Western states, and in maintenance of stream flow (including water quality enhancement) through controlled releases. Any effluent

limitation guideline would have to be developed with exceeding care to take into account these complex factors.

It is not clear that it will be possible to develop category-wide effluent limitations or standards for dams. There is some evidence that the environmental problems which are caused by dams are so site-specific that uniform national requirements cannot be developed. If a dam causes environmental problems at one location, structurally similar dams may pose either no problem or markedly different problems in different locations. Further technology to solve a problem in one dam may not work for another dam with similar problems. This disparity among structurally similar dams means that it will be difficult, perhaps impossible, for EPA to identify subcategories subject to uniform limits. This technique is the only means by which the Agency can establish effluent limits for categories of diverse sources. If it is unavailable, effluent limitations guidelines cannot be developed.

Even assuming it is possible to develop effluent limitations guidelines for dams, developing uniform national effluent limitations where there are frequently overriding site specific problems has never been attempted before in the Effluent Guidelines Program.

The judgment gives very little consideration to the practical problems and relative benefits of permitting effort. Available information and experience indicates that the controllable adverse water quality impacts from the operation of existing

dams are extremely small compared with other tpes of impacts, particularly those from the discharge of municipal and industrial wastewaters. Therefore, the significant amount of resources which would be required for permitting dams would be diverted from the already limited resources devoted to the existing permit programs for municipal and industrial wastewater dischargers. If implemented, the net result of this judgment could be that resources would be diverted from areas of high productivity of environmental benefits to areas of low environmental benefits.

Water quality effects from the construction of new dams are already adequately evaluated and regulated under existing environmental programs, such as the Section 401 certification program and Section 404 "Dredge and Fill" permit program administered by the Corps of Engineers.

The section 401 certification process is used to consider and integrate water quality impacts in regard to water resource issues. Also, in evaluating this process, States indicated that water quality standards are used as a basis for regulation and that corrective action can be compelled where the standards are or would be violated.

In addition to specific State authorities, a number of States reported that they have an active section 401 certification program under the authority of Clean Water Act, which deals with all major dams. For example, in Colorado,

the coordination occurs through the section 404 permit process, the section 401 certification reviews, and the Environmental Impact Statement reviews. This is also done in Louisiana, Massachusetts, Idaho, Montana, Maine, North Carolina, Oklahoma, Oregon, South Dakota, Virginia, and Washington.

Section 401 allows for the balancing of water resources uses and water quality impacts unlike section 402 which would require a preeminence of water quality concerns, potentially resulting in a significant distortion of the initial water resources purposes.

Conclusion

Based on the above considerations, in ICWP's view, the regulatory approach called for by the National Wildlife Federation v. Gorsuch decision is neither the most effective nor the most efficient method of addressing water quality problems related to reservoirs. A more appropriate vehicle, utilizing State dam permitting coupled with state best management practices and technical assistance program, should be endorsed by Congress.

This, Mr. Chairman, concludes my statement on behalf of the Interstate Conference on Water Problems. Mr. Silbermann and I will be pleased to attempt to respond to any questions you or the Members of the Subcommittee may have.

ATTACHMENT A

DAMS QUESTIONNAIRE --

INTERSTATE CONFERENCE ON WATER PROBLEMS

ICWP DAMS QUESTIONNAIRE

The Dams questionnaire was sent to all States, and territories, and to those regional, interstate and intrastate agencies which are members of ICWP. The questionnaires were mailed the week of June 22. As of July 21, 35 states and 6 regional agencies had responded. Of the 35 states, in almost all instances the State contact included both a water resource and a water quality professional reflecting strong coordination between these functions at the State level.

ICWP - AGENCY RESPONSES

The six regional agencies which responded by July 19 are: the Association of California Water Agencies; the Delaware River Basin Commission; the Miami Conservancy District in Ohio; the Pat Harrison Waterway District; the Sabine River Authority of Texas; and the Susquehanna River Basin Commission. A summary of their responses follows.

Five of the six agencies reported that they have a mechanism other than NPDES which regulates the construction and/or operation of dams to consider water quality impacts. Most cited the statute which created their jurisdictions as providing sufficient authority.

Three agencies gave definitions of "dam" which is subject to regulation. They are: the construction of new impoundments or the enlargement or removal of existing impoundments, for whatever purpose, when the storage capacity is greater than 100 million gallons; any structure used for the retention of water, and, any dam which impounds more than 200 acre feet of water.

Five of the agencies reported that they already have standards or guidelines for the protection of water quality which are applied in the review of permit applications for dam construction and for dam or reservoir operation. Elements cited include: erosion and sediment control; aeration devices or measiver; thermal release control; conservation release/

minimum flow requirements downstream to protect water quality; and water quality monitoring. In addition, one agency noted that it has specific stream water quality standards which must be met during dam construction and reservoir operation and the projects are reviewed on a case-by-case basis to assure that downstream water quality will not be affected.

All six agencies reported that review of permit applications or project proposal for dams or reservoirs are coordinated with State water quality activities; state fish and game agencies; and the U.S. Fish and Wildlife Service.

Four agencies reported that water quality permits are required for dam construction; only one reported that such a permit is also required by the U.S. Fish and Wildlife Service.

Five agencies reported that if an existing dam or reservoir causes or contributes to pollution, it is subject to corrective action.

Four agencies state their view that NPDES permits should not be required for dams, water stored in reservoirs or waters released from reservoirs. One stated the affirmative, and one did not answer.

ATTACHMENT B

ICWP CORRESPONDENCE REGARDING DAMS AS

POINTS SOURCES OF POLLUTION

July 6, 1982

Joan M. Kovalic
Executive Director
Interstate Conference on
Water Problems, Suite 300
1919 Pennsylvania Ave., N.W.
Washington, D.C. 20006

Dear Joan:

I can't answer the ICWP Dams Questionnaire because ICPRB does not have authority for the NPDES program or for construction and/or operation of dams. However we do have a related activity which may be of interest.

At the request of the State of Maryland, ICPRB organized earlier this year a Potomac Instream Flow Management Committee. Membership is composed of representatives of water and fisheries agencies of Maryland, other states bordering the Potomac, and the federal government, including the Corps of Engineers. The Committee's charge is to provide recommendations to the operators of upstream dams, i.e., the Corps of Engineers (Bloomington Dam), the Upper Potomac River Commission (Savage River Dam), and the State of Maryland for optimizing instream water quality, fisheries management, and recreation opportunities within the statutory and contractural constraints of the projects (flood control, water supply and water quality control). The committee meets periodically, develops dam release and other operating recommendations, tests their practicability with computerized reservoir and flow models, and then provides them officially for use by the dam operators, representatives of which participate in the committee.

To date the recommendations have covered dam operations to control acidity and pH, manage bass spawning temperatures, protect trout fishery habitat, and provide for white water canoe competition in the upper Potomac North Branch and Savage River. The recommendations will vary from month to month and year to year depending on variations in rainfall, runoff, and reservoir storage. They can be carried out only if dam operation flexibility is retained and utilized. The instream flow management benefits would be lost with the loss of flexibility resulting from the imposition of rigid NPDES permits for the dams.

Sincerely yours,

Paul W. Eastman, P.E.
Executive Director

PWE:ss

INTERSTATE COMMISSION ON THE POTOMAC RIVER BASIN
1055 First Street
Rockville, Md. 20850
(301) 340-2661

JAMES R. BARNETT, Executive Director
MICHAEL R. MELTON, Assistant Director

OKLAHOMA WATER RESOURCES BOARD

P.O. BOX 53585 • 1000 N.E. 10TH STREET • OKLAHOMA CITY, OKLAHOMA 73152 • (405)271-2555

DATE: June 29, 1982

TO: Joan M. Kovalic
Executive Director/General Counsel
Interstate Conference on Water Problems
1919 Pennsylvania Avenue, N.W., Suite 300
Washington, D.C. 20006

FROM: James R. Barnett
Executive Director

SUBJECT: Potential Water Quality Impacts of Dam

The following is being transmitted to you for your consideration in the development of a policy statement for ICWP on the potential redefinition of dams as a nonpoint source under the Clean Water Act:

> The discharge of waters from dams generally has little impact on the downstream environment. But in specific cases there can be severe localized impacts that must be dealt with on a case-by-case basis.
>
> The issuance of a permit to discharge within prescribed limits generally assumes some control over the character of the discharge itself. In the vast majority of dams, no such control exists at the damsite. Therefore, the only technique available to effect a change in the discharge is to apply management practices to the watershed. For this reason dams should be categorized as nonpoint sources for purposes of the Clean Water Act.

Please let me know if I can be of further assistance.

GERALD E. BORELLI, Chairman
EARL WALKER, Vice-Chairman
L. L. MALES, Secretary

ERNEST R. "Jack" TUCKER, Member
JOHN B. JARBOE, Member
ROBERT S. KERR, JR., Member

R. G. JOHNSON, Member
RALPH G. McPHERSON, Member
GARY W. SMITH, Member

COLORADO DEPARTMENT OF HEALTH

Richard D. Lamm
Governor

Frank A. Traylor, M.D.
Executive Director

July 12, 1982

Joan M. Kovalic
Executive Director/General Counsel
Interstate Conference on Water Problems
1919 Pennsylvania Avenue N.W., Suite 300
Washington D.C. 20006

Dear Joan:

Bill McDonald referred the attached questionnaire to me for direct response because of the issue of dam releases as point sources. The questionnaire is being returned without the benefit of adequate time to prepare a more polished and elaborate response. But hopefully it will prove useful.

Let me emphasize that the issue of permitting reservoir releases is extremely controversial and concerning to a variety of interests in Colorado. We have had few problems that I am aware of associated with reservoir releases. Those few that might exist certainly do not warrant the overkill approach of taxing our permit program resources. Other regulatory mechanisms can be used to address those instances, if they became serious enough. As a result, we have been vocal in our opposition to considering reservoir releases as point sources.

Please call if we can provide further information. Good luck on your selection to this position with ICWP. Hope to see you in Salt Lake City.

Sincerely,

Gary G. Broetzman
Director
Water Quality Control Division

GGB:kh

attachment

cc: Bill McDonald
Jeris Danielson

A GOVERNMENTAL AGENCY
OF THE
State of Texas

SABINE RIVER AUTHORITY
of Texas

P. O. BOX 579
ORANGE, TEXAS
77630

May 18, 1982

FOR YOUR INFORMATION

Originals of this correspondence were the date above mailed to the following:

The Honorable Charles Wilson
The Honorable Sam B. Hall, Jr.
The Honorable Ralph M. Hall

In the case of National Wildlife Federation, et al vs Anne Gorsuch, Administrator, U. S. Environmental Protection Agency, et al, United States District Judge Joyce Hens Green has ordered that dams be regulated as point sources of pollution under Sections 301(a) and 402(a) of the Clean Water Act.

The Sabine River Authority of Texas owns and operates two reservoirs in the Upper Sabine Basin, namely Lake Tawakoni and Lake Fork Reservoirs. Additionally, the Authority jointly owns and operates with the Sabine River Authority, State of Louisiana, the bi-state Toledo Bend Reservoir Project in the Lower Sabine Basin.

The requisition of permits under the National Pollutant Discharge Elimination System (NPDES) would additionally impose substantial administrative and other cost-related expenditures to the operation of these Reservoirs. At the least, and of equal concern would be the deviation of the Authority's water rights and the counteraction of the Reservoirs' intended purposes which would occur through NPDES permit limitations on the release of impounded waters. The overall effect of these actions and the negative consequences produced therefrom would seriously impair the Authority in providing water supply and related services for the benefit of the citizens of the State of Texas.

SABINE RIVER AUTHORITY of Texas

We urge your support of the enactment of legislation to specifically exempt dams as point sources of pollution under the NPDES permit program of the Clean Water Act. Your assistance in this matter is appreciated, and please let me know if you should need any additional information.

Sincerely yours,

SABINE RIVER AUTHORITY OF TEXAS

Sam F. Collins

Sam F. Collins
Executive Vice President
and General Manager

bs

cc: Mr. J. W. O'Meara, Executive Vice President
National Water Resources Association

Mr. B. Joseph Tofani, President
Water Resources Congress

Ms. Joan Kovalic, Executive Director and General Counsel ← THIS COPY FOR
Interstate Conference on Water Problems

State of Idaho
DEPARTMENT OF WATER RESOURCES
STATE OFFICE, 450 W. State Street, Boise, Idaho

JOHN V. EVANS
Governor

A. KENNETH DUNN
Director

Mailing address:
Statehouse
Boise, Idaho 83720
(208) 334-4440

May 20, 1982

Mr. Frank Kudrna, Director
Division of Water Resources
Dept. of Transportation
300 N. State Street, Room 1010
Chicago, Illinois 60610

Dear Mr. Kudrna:

I am replying to the recent memorandum from Joan Kovalic of ICWP requesting my comments on the action by the U.S. District Court decision, National Wildlife Federation vs. Goruch, regarding dams as point sources of pollution.

This action by the U.S. District Court is of major concern to Idaho and was addressed by the Idaho legislature in House Joint Memorial No. 18 (copy attached) in January of this year. The Idaho legislature has clearly stated it wishes to see P.L. 92-500 amended to eliminate the application of NPDES permits to discharges from reservoirs. This matter will be brought before the Idaho Water Resource Board for action at its next regular meeting in July.

I would bring to your attention that the Western States Water Council (WSWC) at its meeting in April of this year passed a resolution supporting S-2280 (copy attached) which would amend Section 502 of the Clean Water Act of 1977 by adding the following sentence at the end of the subsection, "These terms do not include effects upon water quality resulting from: (1) the impoundment of waters or (2) the release of impounded waters with water quality effects resulting solely from such impoundment, or (3) the method of release of impoundment waters." The twelve member states of the Western States Water Council support congressional action to amend the U.S. District Court decision.

The draft bill included with the ICWP memorandum differs from S-2280 in the approach used to address the problem caused by the court decision. S-2280 would resolve the problem by defining that the effect of discharges from dams are not to be considered as pollution, while the draft bill provided by ICWP would seek to resolve the problem by defining that the feature (dams) do not contribute to pollution. The second (ICWP) version requires more amendments to P.L. 92-500 and also involves the issue of future definitions of "navigable

waters." The bill also raises a question of why only three water uses are included in Section 402(l)(ii) (i.e., industrial, recreational, etc. not mentioned) and the significance of the word "sole." The bill (S-2280) endorsed by the WSWC appears to be preferable in that it is concise and does not become involved in other issues.

I appreciate the opportunity to serve as a member of the ICWP committee reviewing this matter and plan to attend the May 26-27 meeting in Columbia, South Carolina.

Sincerely,

A. KENNETH DUNN
Director

AKD:alw

cc: Water Board Members
WSWC

IN THE HOUSE OF REPRESENTATIVES

HOUSE JOINT MEMORIAL NO. 18

BY WAYS AND MEANS COMMITTEE

A JOINT MEMORIAL

TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES IN CONGRESS ASSEMBLED, AND TO THE CONGRESSIONAL DELEGATION REPRESENTING THE STATE OF IDAHO IN THE CONGRESS OF THE UNITED STATES REQUESTING APPROPRIATE ACTION TO AMEND THE CLEAN WATER ACT.

We, your Memorialists, the House of Representatives and the Senate of the State of Idaho assembled in the Second Regular Session of the Forty-sixth Idaho Legislature, do hereby respectfully represent that:

WHEREAS, the United States District Court for the District of Columbia has held that the Environmental Protection Agency must issue regulations covering dams as a point source category under Section 402 of the Clean Water Act, P.L. 92-500; and

WHEREAS, in the opinion in the case of "National Wildlife Federal vs. Gorsuch" issued on January 29, 1982, Judge Joyce Hens Greene ruled that certain water quality conditions associated with dams and reservoirs should be dealt with as a "discharge" of pollutants prohibited by Section 301 of P.L. 92-500; and

WHEREAS, Judge Greene has rejected the Environmental Protection Agency's long held position that the National Pollutant Discharge Elimination System does not apply to releases from reservoirs and the Court has held that the Environmental Protection Agency has violated a nondiscretionary duty in failing to regulate dams with NPDES permits;

NOW, THEREFORE, BE IT RESOLVED by the members of the Second Regular Session of the Forty-sixth Idaho Legislature, the House of Representatives and the Senate concurring, that P.L. 92-500 be amended to eliminate the application of NPDES permits to discharges from reservoirs; and

BE IT FURTHER RESOLVED that the Chief Clerk of the House of Representatives be, and she is hereby authorized and directed to forward copies of this Memorial to the Secretary of State and presiding officers of the Houses of the Legislatures of each of the other States in the Union, the President of the Senate and the Speaker of the House of Representatives of Congress, and the congressional delegation representing the State of Idaho in the Congress of the United States.

State of South Carolina
Water Resources Commission

Clair P. Guess, Jr.
Executive Director

June 25, 1982

Mrs. Joan M. Kovalic, Executive Director
Interstate Conference on Water Problems
1919 Pennsylvania Avenue, N.W.
Suite 300
Washington, D. C. 20006

Dear Joan:

The position that South Carolina takes at this point with respect to an across the board identification of dams as point sources is negative.

It is a most dangerous view to categorize all dams as being point sources. It is our opinion at this time that dams should be separately evaluated, tested and beyond the shadow of a doubt, proven to be point sources of pollution rather than generalized.

Further, any proposed corrections in those reservoirs found faulty should not be adversely penalized until a cost benefit ratio applies to corrections that may be proposed.

The construction of new dams and reservoirs should apply the very latest technology in providing for such baffles and current deflectors as may be necessary to hold to the least level a point source contaminant. It should also consider adverse effects from the reservoir releases downstream. Most recover rapidly.

We feel that this is one of the major national water policy issues that should be directly and emphatically addressed by this session of the Congress to avoid misunderstandings, unreasonable cost and non-productive proposals for correction.

In short, we also fear that the larger reservoirs as well as the smaller ones developed under Public Law 566 may be categorized down to as small as 10 acres in size. Dams in general terms should be considered as settling basins and a point of collecting certain non-point contaminants and thereby protecting the effluent flow.

It should be noted that there are two technologies that when applied to larger dams are beneficial in maintaining quality. One is the pump storage concept which recirculates and changes the relative position of each particulate every 24 hours for the most part. The second is the adequate use of rip rap below the dam discharge point, which if supplied in sufficient quantity, will help reestablish oxygen levels at least cost over time.

P.O. Box 50506 / 1001 Harden Street, Suite 250 / Columbia, S.C. 29250 / (803) 758-2514

Basically, we oppose the court's position on the non-point decision, and we urge the Congress to establish such language in order to avoid the continuing development of water law through the court.

Sincerely,

Clair P. Guess, Jr.
Executive Director

CPGJr:vk

JOE D. TANNER
Commissioner

J. LEONARD LEDBETTER
Division Director

Department of Natural Resources

ENVIRONMENTAL PROTECTION DIVISION
270 WASHINGTON STREET, S.W.
ATLANTA, GEORGIA 30334

May 11, 1982

Mr. Frank Kudrna, Director
Division of Water Resources
Department of Transporation
300 North State Street
Room 1010
Chicago, Illinois 60610

Dear Mr. Kudrna:

As requested by Joan Kovalic, I am sending you a copy of a letter we previously provided to the Environmental Protection Agency on the subject of dams as point sources. A decision with the exact opposite finding has been since released regarding a dam on the Savannah River between Georgia and South Carolina. I have provided Joan a copy of that decision.

Sincerely,

J. Leonard Ledbetter

J. Leonard Ledbetter
Director

JLL:seh
Enclosure
cc: Joan Kovalic

AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

Department of Natural Resources
ENVIRONMENTAL PROTECTION DIVISION
270 WASHINGTON STREET, S.W.
ATLANTA, GEORGIA 30334

JOE D. TANNER
Commissioner

J. LEONARD LEDBETTER
Division Director

March 17, 1982

Ms. Martha Prothro
Acting Director
Office of Water Enforcement (EN336)
U. S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Re: National Wildlife Federation vs. EPA
Discharge from Dams

Dear Ms. Prothro:

The Georgia Environmental Protection Division has reviewed both the judgement of the United States District Court for the District of Columbia and your draft affidavit in support of EPA's motion to reconsider the judgement. We agree with the points and concerns in your affidavit and wholeheartedly support reconsideration of the judgement. In addition to your affidavit, we offer the following comments for your consideration:

1. The judgement gives very little consideration to the practical problems and relative benefits of a permitting effort. All available information and experience indicates that the controllable adverse water quality impacts from the operation of existing dams are extremely small compared with other types of impacts, particularly those from the discharge of municipal and industrial wastewaters. Therefore, the significant amount of resources which would be required for permitting dams would be diverted from the already limited resources devoted to the existing permit programs for municipal and industrial wastewater dischargers. If implemented, the net result of this judgement would be exactly opposite to the desires of the Congress, the public, the plantiffs and of the ruling judge. Resources would be diverted from areas of high productivity of environmental benefits to areas of low environmental benefits.

2. Water quality effects from the construction of new dams are already adequately evaluated and regulated under existing environmental programs, such as the Section 404 "Dredge and Fill" permit program administered by the Corps of Engineers.

3. If dams must be permitted, it is suggested that only the major dams on major rivers for which water quality impacts have been documented be included in the permit program. The others, SCS dams, farm pond dams, community and residential lake dams, and etc. should be totally exempt. In Georgia, there are approximately 3,000 dams of which only a dozen would fall into the "major" category.

We appreciate the opportunity of expressing our concerns over the judgement and would be willing to offer further input as appropriate.

Sincerely,

J. Leonard Ledbetter
Director

JLL:dwk

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
P. O. Box 1467
Harrisburg, Pennsylvania 17120

(717) 783-5338

In reply refer to
RN-WR

June 15, 1982

Joan Kovalik, Esquire
Executive Director and General Counsel
Interstate Conference on Water Problems
1919 Pennsylvania Avenue, N.W., Suite 300
Washington, D. C. 20006

Dear Joan:

This is in response to your June 7 correspondence concerning dams as point sources of pollution.

I believe Bruce Barker's draft report presents a fair summary of the technical issues raised by the National Wildlife Federation v. Gorsuch decision. The substantial policy issue, for the States and Congress, is how best to address the potential water quality impacts of dam construction and reservoir operation.

At the outset, it should be noted that when in the absence of the NPDES permit system or effluent guidelines promulgated by EPA, the water quality problems of dams can be and are addressed by programs operated under Pennsylvania law, and similar programs in our sister States.

In the Commonwealth of Pennsylvania, an adequate program already exists at the State level to address the potential water quality impacts of dams and reservoirs.

Since 1913, the construction and operations of dams and other structures in Pennsylvania's streams has been subject to State regulation and permitting. In 1978, our laws were recodified in the Pennsylvania Dam Safety and Encroachments Act, 32 Pa. Stat. Ann. §§ 693.1 - 693.27. This act governs the design, construction, operation, maintenance, monitoring, repair and removal of any dam, whether located on a stream or not, with a depth of 15 feet or more, storage capacity exceeding 50 acre-feet, or having a contributory drainage area of 100 acres or more. More than 1000 dams and reservoirs in the Commonwealth (both existing and new impoundment) are subject to the act.

The Act provides that, in order to qualify for a permit to construct, operate or maintain a dam and reservoir, the proposed project must comply with not only the Dam Safety and Encroachments Act, but all other laws

administered by the Department of Environmental Resources, the Pennsylvania Fish Commission, and the interstate compact river basin commissions. Thus, the design, construction and operation of any existing or new dam must be reviewed for compliance with all State environmental laws, including the water quality standards adopted under the Pennsylvania Clean Streams Law.

The Department's Dam Safety and Waterway Management regulations contain numerous provisions relating to water quality protection. A copy of DER's rules (25 Pa. Code, Ch. 105) is enclosed for reference.

General provisions require DER, in reviewing any permit for a dam, reservoir or other structure, to consider the effect of the project on the regimen and ecology of the waterway or body of water, water quality, stream flow, fish and wildlife, aquatic habitat, instream and downstream uses, and other significant environmental factors.25 Pa Code § 105.14. All applications for substantial dams and reservoirs are subject to an environmental assessment and balancing process. 25 Pa. Code §§ 105.15 - 105.16. Under permit coordination procedures (25 Pa. Code §§ 105.21, 105.24), each application is reviewed not only by State dam safety professionals, but also by the Department's Bureau of Water Quality Management and the staff of the Pennsylvania Fish Commission. Water quality issues are identified, and appropriate design and operating conditions imposed to assure compliance with States and basin commission water quality standards for the affected streams.

In addition to these general requirements, special provisions relating to dams and reservoirs establish criteria for release rates to maintain stream flows for purposes of public health protection, water quality control, conservation of fisheries and aquatic habitat and protection of other uses. 25 Pa. Code § 105.113. An operating plan is required for most dams, outlining the schedules of storage and release, which may be used to avoid or mitigate water quality and other environmental impacts associated with reservoir development and operations. 25 Pa. Code § 105.131.

Finally, the Dam Safety and Encroachments Act authorizes the Department, if it finds that any dam is adversely affecting the environment (including water quality), to issue orders to the owner to repair, modify or remove the facility, or take such other actions (such as operational changes) to abate the problem. 32 Pa. Stat. Ann. § 693.14 (b).

In our experience, most if not all of the potential water quality impacts of a dam can be avoided or controlled by operational practices which are incorporated in the operating plan of the reservoir. Such operational actions may be appropriately described as best management practices for purposes of water quality control.

As noted in Mr. Barker's report, some water quality problems can be created or avoided by design elements of the dam, particularly related to spillway and outlet structures. However, these elements vary greatly according to the type, size, and site of the dam.

Overall, the water quality problems posed by dams in large part depends on where they are located, upstream sources of pollution that may be concentrated in the dam, the purpose of the reservoir, its depth and volume, and its operating program. For this reason, it is extremely difficult to categorize the design, operation, or impact of a proposed reservoir, and hence to prescribe effluent guidelines or design standards that are meaningful for a particular category of facility.

In our view, the regulatory approach suggested by the National Wildlife Federation decision is not the most effective or efficient method of addressing water quality problems related to reservoirs. A more appropriate vehicle, utilizing State dam permitting coupled with best management practices and technical assistance programs, should be endorsed by Congress.

Sincerely,

R. Timothy Weston

R. Timothy Weston
Associate Deputy Secretary
for Resources Management

RICHARD D. LAMM
Governor

JERIS A. DANIELSON
State Engineer

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581

fd 5/26

May 14, 1982

RECEIVED
MAY 20 1982
MONT. DEPT OF NATURAL RESOURCES & CONSERVATION

Mr. John E. Acord
Assistant Administrator
Montana Water Resources Diision
32 South Ewing
Helena, MT 59620

Dear Mr. ~~Acord:~~ John

Enclosed please find a copy of SJR 12 passed by the 53rd General Assembly, State of Colorado, addressing the severe threat to the water users throughout the nation as a result of Judge Green's opinion in Civil Action No. 79-0915, National Wildlife Federation, et al. vs. Anne Gorsuch, Administrator, U.S. Environmental Protection Agency, et al.

I feel it is incumbent on all of us to work diligently for passage of S. 2280, copy enclosed, introduced by Senators Murkowski and McClure.

Sincerely,

Jeris A. Danielson
State Engineer

JAD/pjl

Enclosures (a/s)

Second Regular Session

Fifty-third General Assembly

LDO NO. *82 0663/1

STATE OF COLORADO

BY SENATOR Anderson; also REPRESENTATIVE Younglund.

SENATE JOINT RESOLUTION NO. 12

URGING THE UNITED STATES CONGRESS TO AMEND THE CLEAN WATER ACT TO PROVIDE THAT WATER QUALITY CHANGES CAUSED BY FLOW DIVERSION, CARRIAGE, AND RELEASE STRUCTURES, INCLUDING DAMS, DO NOT REQUIRE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMITS.

WHEREAS, In National Wildlife Federation v. Gorsuch (D.C.D.C.), No. 79-0915, the federal district court in Washington, D.C., ruled that dams require national pollution control permits under the federal Clean Water Act; and

WHEREAS, The federal Water Pollution Control Amendments of 1972 and their successor, the 1977 Clean Water Act, have been consistently construed by federal Republican and Democratic administrations over the last ten years as not requiring pollution control permits for all dams; and

WHEREAS, There are approximately two million three hundred thousand dams in the United States which would require permits under the court's decision; and

WHEREAS, Releases of water from these dams play a crucial role in the replacement of water for downstream senior decrees, minimum stream flows for fisheries, and the fulfillment of interstate compact obligations; and

WHEREAS, The federal district court decision interprets the 1977 Clean Water Act to require that the Environmental Protection Agency (EPA) control the structure and operational patterns of dams; and

WHEREAS, This federal control would seriously impair the water allocation system of Colorado; and

WHEREAS, The Water Quality Control Act of Colorado prohibits requiring a pollution control permit for the carriage, storage, or release of water from or into streams, lakes, reservoirs, or conveyance structures in the exercise of water rights; and

WHEREAS, Colorado law provides that water quality standards may apply to discharges from dams when the state Water Quality Control Commission has adopted appropriate control regulations; and

WHEREAS, This assures that, without requiring pollution control permits, Colorado can act, when justified to protect beneficial uses made of its water resources, to address specific water quality problems associated with any particular dam within Colorado; and

WHEREAS, EPA's long-standing interpretation that dams are non-point sources under the 208 planning process allows for responsible state integration of its water quantity and water quality management programs, and EPA uniform national standards would limit the flexibility of the states to address their own water quality concerns; and

WHEREAS, The Colorado Water Conservation Board and the Colorado Water Quality Control Commission have both adopted resolutions opposing any requirement for national pollution control permits for dams; and

WHEREAS, In the 1977 authorization of the Clean Water Act, Congress rectified a similar court decision by providing that irrigation return flows are not point sources of pollution; now, therefore,

Be It Resolved by the Senate of the Fifty-third General Assembly of the State of Colorado, the House of Representatives concurring herein:

That the Congress of the United States clearly provide in the Clean Water Act that changes in water quality caused by the carriage, storage, or release of water through dams, conveyance structures, and flow diversion facilities are not point sources of pollution which require national pollution control permits.

Be It Further Resolved, That this resolution be transmitted to the Colorado congressional delegation and the Governor of the State of Colorado, with a request for their active assistance in obtaining such an amendment to the Clean Water Act.

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Montpelier, Vermont 05602

OFFICE OF THE SECRETARY

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources and Environmental Engineering
Division of Protection
Natural Resources Conservation Council

July 26, 1982

Joan M. Kovalic, Esq.
Executive Director/General Counsel
Interstate Conference on Water Problems
1919 Pennsylvania Avenue, N.W. - Suite 300
Washington, D.C. 20006

RE: EPA Proposed Amendment to Clean Water Act

Dear Joan:

We are very concerned over the proposed amendment to the Clean Water Act regarding dams. In Vermont new hydroelectric dams are one of the most significant environmental issues concerning our rivers. Changes in flow patterns, thermal characteristics and low dissolved oxygen are very real issues. EPA's fact sheet is misleading. Both existing and new dams cause serious water quality and fisheries issues.

FERC already exempts certain categories of dams up to 5 MW. Thus, it can be argued that §401 is not available for review of those projects. Proposed federal legislation, moreover, would raise the FERC exemption level to 15 MW.

It might very well be that §402 will be the only solid means of reviewing great numbers of hydroelectric projects. In Vermont, where we exercise primary discharge permit review, we would lose an extremely valuable tool to review these projects.

It is true that existing, non-hydroelectric dams are not terribly destructive. In most cases river regimes have adjusted to such dams. This is not always true of hydroelectric projects operated for peaking power. These dams can cause serious fluctuations in river flow, in turn disrupting fisheries and aquatic resources, and so on. Any new dam, however, can be a real problem if not constructed and operated in sound environmental fashion. It seems to me that administrative categorization of dams by EPA is the answer to the fear of an excessive new workload--just because they're there is no reason to have to individually review 2 million dams. The judge in National Wildlife Federation v. Gorsuch (January '82) made this point explicitly.

The principal point to remember is that dams can cause serious water quality problems. This fact should be recognized by the Clean Water Act, and a means for the states to deal with the problem should be included in the Act. The NPDES program could be tailored to fit this need, or 303(e) could be modified, together with other language, to provide actual regulatory means. Simply changing the law without serious consideration as to the problems dams create would not be good natural resource management.

I hope this is of some help.

Yours very truly,

Stephen B. Sease
Director of Planning

SBS/tc

Statement of the
Western States Water Council
before the
Subcommittee on Environmental Pollution,
Committee on Environment and Public Works
United States Senate
July 28, 1982
presented by
A. Kenneth Dunn
Western States Water Council Member from Idaho
and
Director of the Idaho Department of Water Resources

Mr. Chairman and members of the subcommittee, I am A. Kenneth Dunn, Director of the Idaho Department of Water Resources and a member of the Western States Water Council representing the State of Idaho. The Western States Water Council was established in 1965 to accomplish effective cooperation among western states in planning for programs leading to integrated conservation, use and development by state, federal and other agencies of their water resources. Twelve states are represented on the Council by members who are appointed by and serve at the pleasure of the Governor of each state. The Council has long been interested in water pollution control and abatement.

The Council states are located in the arid and semi-arid regions of our nation, where water has been and continues to be a critical issue which occupies much of the attention of state policy makers and administrators. Because of the scarcity of water resources in these regions, it has been of vital importance to conserve water from spring runoff for subsequent use through construction and operation of storage dams and reservoirs. In order to manage this important resource, western states have developed sophisticated and comprehensive systems of water allocation based on concepts of beneficial use. Intrastate systems are complimented by interstate compact allocations, equitable apportionments, and other agreements pertaining to water courses flowing in or through more than one state. Congress has repeatedly approved and deferred to these state and interstate water allocation systems. The Supreme Court has stated that water rights for reclamation dams must be obtained in compliance with state law and that states may impose any conditions in those permits which are not inconsistent with clear Congressional directives regarding the reclamation project.

The ability to operate dams and reservoirs is absolutely essential to the proper management of western water resources. Regulating storage and release of water from these dams plays a crucial role in providing water to comply with water right decrees in maintaining instream flows for fishery and water quality purposes, and in fulfilling interstate compact obligations.

It seems clear from the language of the Clean Water Act that Congress intended to delegate to the states the role of determining how to integrate water quality and water supply programs involving dams and reservoirs. This delegation is of the utmost importance in the arid West. In this role, states are clearly in a position to address specific water quality problems associated with a particular dam, as well as carry out other responsibilities associated with state water management.

The Environmental Protection Agency has continually interpretated the Clean Water Act as consistent with this theory of delegation by requiring that flow modification structures such as dams not be considered as point sources of pollution, but rather as non-point sources. As non-point sources, dams have been primarily subject to state control, with the Environmental Protection Agency providing technical guidance. This process allows for responsible state integration of its water supply and water quality programs.

Ignoring this long standing policy, the federal district court in Washington, D.C., in National Wildlife Federation v. Gorsuch, ruled that dams must obtain point source pollution control permits from the Environmental Protection Agency. The court indicated that changing the operational pattern of dams and installing multiple outlet works, among other methods, are means to rectify the pollution effects of dams.

In subjecting all existing and proposed dams to the National Pollution Discharge Elimination System, the court has created an untenable situation. There are estimated to be over two million dams in the nation which the decision affects. Untold sums would conceivably have to be spent to retroactively bring dams into compliance with point source pollution control requirements. Even more importantly in the western states, established hierarchies of water use priority could well be disturbed. Both intrastate and interstate water allocation schemes would be jeopardized if the structure and operational pattern of dams were now changed pursuant to EPA edicts.

Although the losing parties in the National Wildlife Federation case are presently seeking to overturn the decision through the appellate process, the Western States Water Council urges this Subcommittee to endorse specific legislative action which would clearly and permanently clarify Congressional intent; namely, that changes in water quality caused by the carriage, storage, or release of water through dams, conveyance structures and flow diversion facilities are not point sources of pollution which require National Pollution Discharge System permits.

The Western States Water Council supports S. 2280, sponsored by Senator Murkowski, as a sound vehicle for amending the Clean Water Act to accomplish this purpose. S. 2280 directly and efficiently addresses the problem by simply excluding from the definition of "discharge of pollutants" the effects of water impoundment or

release from dams. The "discharge" definition would then be consistent with the definition of "pollutant" contained in Section 502(6) of the Act, which clearly alludes to introduction of extraneous material into the water way, as opposed to alterations in water flow. It would also be consistent with the term "point source" contained in Section 502(14) of the Act, which makes no mention of dams. Of course, this will not mean dams will be unregulated as with regard to pollution control. It simply means that they will be regulated as "non-point sources", and thus treated as Congress intended when passing the Clean Water Act.

Mr. Chairman, I cannot overstate the importance from a western perspective of reiterating Congressional intent with regard to dams under the Clean Water Act. The system of water allocation in the West could be severely hampered if the effect of the National Wildlife Foundation decision is not checked. S. 2280 provides an appropriate means to do so. The Western States Water Council urges its passage.

I would now be happy to answer any questions you may have.

97-999 O—82——73

July 29, 1982

UNITED STATES SENATE

Before the Subcommittee On
Environmental Pollution Of
The Committee On
Environment and Public Works

Statement of John A. Rosholt
On Behalf Of The National Water
Resources Association
The Colorado Water Congress,
The Northern Colorado Water
Conservancy District, and
The Association of California
Water Agencies

NPDES Permits for Dams Should Not Be Required

1. The Witness and Interests Represented.

My name is John A. Rosholt, from Twin Falls, Idaho. I am past president and a member of the Board of Directors of the National Water Resources Association. I appear before the Subcommittee on behalf of the National Water Resources Association ("NWRA"), representing the state water agencies in the 17 western states and Hawaii, the Colorado Water Congress and its members, many of whom participated in the litigation

involving NPDES permits for dams, the Northern Colorado Water Conservancy District, and the Association of California Water Agencies, whose members operate dams and provide over 85% of California's water supplies. NWRA members include such municipalities as Denver, Dallas, Phoenix and Los Angeles and the states included as members comprise more than 50% of the land area of the Continental United States.

2. The Issue of NPDES Permits for Dams.

The nation now has approximately 2.3 million dams. The largest proportion of these are dams constructed in the arid West to collect and distribute scarce water for municipal and domestic supplies, agriculture and other purposes. Colorado alone has 27,000 dams, the vast majority of which are used for these purposes.

The construction of a dam necessarily alters the movement, flow and circulation of the waters which it impounds. Accordingly, the construction and operation of dams has long been governed by a web of regulatory controls--other than NPDES permits--at the federal and state level. Exhibit A to this statement catalogs many of these control mechanisms.

In 1970, the first water pollution discharge "permit" program was initiated by the Corps of Engineers under the authority of the Refuse Act of 1899 (33 U.S.C. §407). These regulations required that about 20,000 industrial dischargers

of pollution obtain federal discharge permits. This program was never intended to and did not apply to water flowing through, over and around dams. In 1972, Congress substantially revised and expanded that permit program so that it would apply to publicly-owned sewage treatment works as well. These changes were embodied in the §402 permit system of the Federal Water Pollution Control Act. As expanded to cover industrial sources and municipal sewage plants, the permit program was thought to apply to about 40,000 so-called "point sources." Again, this permit program was widely recognized as not requiring permits for water flowing over dams.

Contemporaneously with passage of the 1972 amendments, EPA responded to a state inquiry by interpreting the §402 permit program as not applying to the water flowing through, over or around dams. Thereafter, four Administrations consistently interpreted the Act as not applying to flows of water over dams because they did not constitute the "discharge of a pollutant" within the meaning of the Act. Over the ten intervening years, permits were required for dam operators who <u>added</u> sewage, cooling water, trash or chemicals to the water impounded behind the dam, but permits were not required for the water flowing through, over or around the dam to which the operators had not added some extraneous material.

In 1978, the National Wildlife Federation ("NWF") petitioned the Carter Administration to change this long

standing policy and practice. Despite lengthy petitions and comments, the Carter Administration declined to change this policy and as a result, in 1979 NWF sued then EPA Administrator Costle to compel the issuance of permits for all of the nation's 2.3 million dams.

On January 29, 1982, the Federal District Court in Washington, D.C. concluded that the flows of water through, over and around dams constituted the "discharge of a pollutant" and thus had all along been illegal without a §402 discharge permit. See National Wildlife Federation v. Gorsuch, 530 F.Supp. 1291 (D.D.C. 1982). The court found that although these dams did not "add" pollutants in a traditional sense, the changes which they caused in the water's movement, flow and circulation could, in some circumstances, create water quality impacts. Thus, for example, the court found that some impoundments may sometimes give rise to a warming of the surface water by sunshine, a reduction in dissolved oxygen, changes in dissolved minerals or sediment, and in some instances, gas supersaturation. The court then rejected the long term agency interpretation of the statute and ordered EPA to issue effluent limitation regulations for dams within 90 days and to subject all dams to the NPDES permit system.

This court decision squarely presents to Congress the issue of whether NPDES permits should now be required for the flows of water through, over or around all 2.3 million dams in the United States.

3. Our Position On The Issue.

The Colorado Water Congress, the Northern Colorado Water Conservancy District, the Association of California Water Agencies and the NWRA strongly urge that the FWPCA be amended to make it clear that NPDES permits are not required for such ordinary flows through, over or around dams. Concurrent resolutions also urging such an amendment have been adopted by both Houses of the Legislatures of the States of California, Colorado, Hawaii, Idaho, Mississippi, Nebraska and Wyoming. The leadership of the South Dakota Legislature has also strongly urged such a clarifying amendment. Exhibit B to this statement contains copies of all of these resolutions. Moreover, the United States Conference of Mayors, representing 750 of the largest cities in the Country, has also filed a statement urging such an amendment. A copy of that statement is also attached as Exhibit C.

4. The Reasons For Our Position.

a. The quality of the water flowing through, over and around dams does not pose any significant environmental problem.

b. The imposition of a new NPDES program for 2.3 million dams would create enormous and unprecedented financial and administrative burdens on the federal govern-

ment, the states and the municipal operators of water resource impoundments.

c. State and local controls over dam-induced water quality changes are more appropriate because these water quality changes are attributable to site-specific topography, climate and hydrology.

d. The country has far more important environmental objectives to pursue with its limited resources.

e. Imposition of a costly new NPDES requirement for dams, especially retroactive application of that requirement to dams built at public expense in reliance on EPA's decade-old contrary interpretation, would be grossly unfair.

f. Application of nationwide NPDES standards to water resource dams could seriously interfere with the role of the states in the allocation of scarce water supplies in the West.

EXHIBIT A

The Regulation of Dams Under Section 402 of the Clean Water Act Is Unnecessary Because There Are Ample Federal And State Authorities To Address Any Pollution Problems Attributable to Dams

1. Construction of dams is regulated under Section 404 of the Clean Water Act.

2. Many dams are regulated by the Federal Energy Regulatory Commission under the Federal Power Act (16 U.S.C. § 791 et seq.).

3. Dam construction is also regulated by the Corps of Engineers under Section 9 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 401 et seq.).

4. Applicants for any of these federal permits are also required to obtain a certification under Section 401 of the Clean Water Act from the appropriate state "that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306 and 307" of the Act.

5. Significant dams can also trigger the comprehensive review required by the National Environmental Policy Act (42 U.S.C. § 4231 et seq.).

6. Dams are also subject to comprehensive guidelines promulgated pursuant to Section 304(f) of the Clean Water Act.

7. State Areawide Waste Treatment Management Plans are required to be submitted to EPA under Section 208 and provide a further regulatory approach to the water quality effects of dams.

8. Pursuant to Section 303 of the Clean Water Act, the States and EPA establish water quality standards for all navigable waters.

9. In Colorado, for example, although state law precludes the issue of NPDES permits for dams (Colo. Rev. Stat. § 25-8-503(5)), the Colorado Water Quality Commission is authorized to "promulgate control regulations" imposing mandatory requirements on any activity "that does cause the quality of any state waters to be in violation of any applicable water quality standard." (Colo. Rev. Stat. § 25-8-205(1)).

* * *

This web of regulatory authority, it is submitted, is adequate to the task of protecting the environment from any harm attributable to dams.

S RECEIVED JUL 1 2 1982

June 30, 1982

CALIFORNIA LEGISLATURE—1981-82 REGULAR SESSION

Assembly Joint Resolution No. 88

Introduced by Norman Waters

March 12, 1982

Assembly Joint Resolution No. 88—Relative to the Environmental Protection Agency.

LEGISLATIVE COUNSEL'S DIGEST

AJR 88, as introduced, N. Waters. Environmental Protection Agency: National Pollutant Discharge Elimination System.

This measure memorializes the Congress of the United States to amend Public Law 92-500 to eliminate the application of National Pollutant Discharge Elimination System permits to releases from reservoirs.

Fiscal committee: no.

WHEREAS, The United States District Court for the District of Columbia has held that the Environmental Protection Agency (EPA) must issue regulations covering dams as a point source category under Section 402 of the Clean Water Act (Public Law 92-500); and

WHEREAS, In the case of National Wildlife Federation vs. Gorsuch issued on January 29, 1982, United States District Court Judge Joyce Hens Green ruled that certain water quality conditions associated with dams and reservoirs should be dealt with as a "discharge" of pollutants prohibited by Section 301 of Public Law 92-500; and

WHEREAS, Judge Green has rejected EPA's long-held position that the National Pollutant Discharge Elimination System (NPDES) does not apply to releases from reservoirs and the Court has held that the EPA has

EXHIBIT B
FOR YOUR INFORMATION
N W R A

violated a nondiscretionary duty in failing to regulate dams with NPDES permits; now, therefore, be it

Resolved, by the Assembly and Senate of the State of California, jointly, That Public Law 92-500 be amended to eliminate the application of National Pollutant Discharge Elimination System permits to releases from reservoirs; and, be it further

Resolved, That the Chief Clerk of the Assembly is directed to forward copies of this resolution to the President and Vice President of the United States, to the Administrator of the Environmental Protection Agency, to the Speaker of the United States House of Representatives, to the Chairman of the Senate Committee on Energy and Natural Resources, to the Chairman of the House Committee on Transportation and Public Works, and to each Senator and Representative from California in the Congress of the United States.

O

Second Regular Session

Fifty-third General Assembly

LDO NO. *82 0663/1

STATE OF COLORADO

BY SENATOR Anderson; also REPRESENTATIVE Younglund.

SENATE JOINT RESOLUTION NO. 12

URGING THE UNITED STATES CONGRESS TO AMEND THE CLEAN WATER ACT TO PROVIDE THAT WATER QUALITY CHANGES CAUSED BY FLOW DIVERSION, CARRIAGE, AND RELEASE STRUCTURES, INCLUDING DAMS, DO NOT REQUIRE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMITS.

WHEREAS, In National Wildlife Federation v. Gorsuch (D.C.D.C.), No. 79-0915, the federal district court in Washington, D.C., ruled that dams require national pollution control permits under the federal Clean Water Act; and

WHEREAS, The federal Water Pollution Control Amendments of 1972 and their successor, the 1977 Clean Water Act, have been consistently construed by federal Republican and Democratic administrations over the last ten years as not requiring pollution control permits for all dams; and

WHEREAS, There are approximately two million three hundred thousand dams in the United States which would require permits under the court's decision; and

WHEREAS, Releases of water from these dams play a crucial role in the replacement of water for downstream senior decrees, minimum stream flows for fisheries, and the fulfillment of interstate compact obligations; and

WHEREAS, The federal district court decision interprets the 1977 Clean Water Act to require that the Environmental Protection Agency (EPA) control the structure and operational patterns of dams; and

WHEREAS, This federal control would seriously impair the water allocation system of Colorado; and

WHEREAS, The Water Quality Control Act of Colorado prohibits requiring a pollution control permit for the carriage, storage, or release of water from or into streams, lakes, reservoirs, or conveyance structures in the exercise of water rights; and

Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.

WHEREAS, Colorado law provides that water quality standards may apply to discharges from dams when the state Water Quality Control Commission has adopted appropriate control regulations; and

WHEREAS, This assures that, without requiring pollution control permits, Colorado can act, when justified to protect beneficial uses made of its water resources, to address specific water quality problems associated with any particular dam within Colorado; and

WHEREAS, EPA's long-standing interpretation that dams are non-point sources under the 208 planning process allows for responsible state integration of its water quantity and water quality management programs, and EPA uniform national standards would limit the flexibility of the states to address their own water quality concerns; and

WHEREAS, The Colorado Water Conservation Board and the Colorado Water Quality Control Commission have both adopted resolutions opposing any requirement for national pollution control permits for dams; and

WHEREAS, In the 1977 authorization of the Clean Water Act, Congress rectified a similar court decision by providing that irrigation return flows are not point sources of pollution; now, therefore,

Be It Resolved by the Senate of the Fifty-third General Assembly of the State of Colorado, the House of Representatives concurring herein:

That the Congress of the United States clearly provide in the Clean Water Act that changes in water quality caused by the carriage, storage, or release of water through dams, conveyance structures, and flow diversion facilities are not point sources of pollution which require national pollution control permits.

Be It Further Resolved, That this resolution be transmitted to the Colorado congressional delegation and the Governor of the State of Colorado, with a request for their active assistance in obtaining such an amendment to the Clean Water Act.

Legislature of the State of Idaho

[Second Regular Session
[Forty-sixth Legislature

IN THE HOUSE OF REPRESENTATIVES

HOUSE JOINT MEMORIAL NO. 18

BY WAYS AND MEANS COMMITTEE

A JOINT MEMORIAL

TO THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES IN CONGRESS ASSEMBLED, AND TO THE CONGRESSIONAL DELEGATION REPRESENTING THE STATE OF IDAHO IN THE CONGRESS OF THE UNITED STATES REQUESTING APPROPRIATE ACTION TO AMEND THE CLEAN WATER ACT.

We, your Memorialists, the House of Representatives and the Senate of the State of Idaho assembled in the Second Regular Session of the Forty-sixth Idaho Legislature, do hereby respectfully represent that:

WHEREAS, the United States District Court for the District of Columbia has held that the Environmental Protection Agency must issue regulations covering dams as a point source category under Section 402 of the Clean Water Act, P.L. 92-500; and

WHEREAS, in the opinion in the case of "National Wildlife Federal vs. Gorsuch" issued on January 29, 1982, Judge Joyce Hehs Greene ruled that certain water quality conditions associated with dams and reservoirs should be dealt with as a "discharge" of pollutants prohibited by Section 301 of P.L. 92-500; and

WHEREAS, Judge Greene has rejected the Environmental Protection Agency's long held position that the National Pollutant Discharge Elimination System does not apply to releases from reservoirs and the Court has held that the Environmental Protection Agency has violated a nondiscretionary duty in failing to regulate dams with NPDES permits;

NOW, THEREFORE, BE IT RESOLVED by the members of the Second Regular Session of the Forty-sixth Idaho Legislature, the House of Representatives and the Senate concurring, that P.L. 92-500 be amended to eliminate the application of NPDES permits to discharges from reservoirs; and

BE IT FURTHER RESOLVED that the Chief Clerk of the House of Representatives be, and she is hereby authorized and directed to forward copies of this Memorial to the Secretary of State and presiding officers of the Houses of the Legislatures of each of the other States in the Union, the President of the Senate and the Speaker of the House of Representatives of Congress, and the congressional delegation representing the State of Idaho in the Congress of the United States.

STATE OF MISSISSIPPI

HOUSE CONCURRENT RESOLUTION NO. 187

A CONCURRENT RESOLUTION MEMORIALIZING THE CONGRESS OF THE UNITED STATES TO ADOPT LEGISLATION AMENDING THE CLEAN WATER ACT OF 1977 TO ELIMINATE THE REQUIREMENT OF A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT FOR WATER RELEASES FROM RESERVOIRS.

WHEREAS, the United States District Court for the District of Columbia has held that the Environmental Protection Agency must issue regulations covering dams as a point source category under Section 402 of the Clean Water Act of 1977, Public Law 92-500; and

WHEREAS, on January 29, 1982, the Honorable Joyce Hens Greene, of the United States District Court for the District of Columbia, issued an opinion in National Wildlife Federal v. Gorsuch, ruling that certain water quality conditions associated with dams and reservoirs should be treated as a "discharge" of pollutants prohibited by Section 301 of the Clean Water Act of 1977, Public Law 92-500; and

WHEREAS, Judge Greene rejected the Environmental Protection Agency's long-held position that the National Pollution Discharge Elimination System is not applicable to water releases from reservoirs; and

WHEREAS, the court in the above case held that the Environmental Protection Agency has violated a nondiscretionary duty in failing to regulate dams and reservoirs with National Pollution Discharge Elimination System permits; and

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE STATE OF MISSISSIPPI, THE SENATE CONCURRING THEREIN, That we do hereby memorialize the United States Congress to adopt legislation amending the Clean Water Act of 1977, Public Law 92-500, to eliminate the application of National Pollution Discharge Elimination System permits to discharges from reservoirs.

BE IT FURTHER RESOLVED, That copies of this Resolution be forwarded to the secretaries of state and presiding officers of the houses of the legislatures of each of the other states in the Union, to the Speaker of the United States House of Representatives, to the President of the United States Senate, to members of the Congress of the United States representing the State of Mississippi, and to the Capitol Press Corps.

ADOPTED BY THE HOUSE OF REPRESENTATIVES
March 24, 1982

C Bramlett
SPEAKER OF THE HOUSE OF REPRESENTATIVES

ADOPTED BY THE SENATE
March 31, 1982

PRESIDENT OF THE SENATE

LEGISLATURE OF NEBRASKA
EIGHTY-SEVENTH LEGISLATURE
SECOND SESSION

LEGISLATIVE RESOLUTION 256

Introduced by Nichol, 48th; Apking, 32nd; Barrett, 39th; Beutler, 28th; Beyer, 3rd; Burrows, 30th; Carsten, 2nd; Chronister, 18th; Clark, 47th; Cope, 36th; Cullan, 49th; DeCamp, 40th; Duda, 14th; Fenger, 45th; Goll, 16th; Goodrich, 20th; Haberman, 44th; Hefner, 19th; Higgins, 9th; Hoagland, 6th; L. Johnson, 15th; Kahle, 37th; Kilgarin, 7th; Koch, 12th; Kremer, 34th; Labedz, 5th; Lamb, 43rd; Landis, 46th; Marsh, 29th; Newell, 13th; H. Peterson, 35th; R. Peterson, 21st; Pirsch, 10th; Remmers, 1st; Rumery, 42nd; Schmit, 23rd; Sieck, 24th; Stoney, 4th; Vickers, 38th; Von Minden, 17th; Wagner, 41st; Warner, 25th; Wiitala, 31st

---

WHEREAS, multiple purpose dams and reservoirs in Nebraska and other states with interstate streams that enter Nebraska have provided numerous benefits for irrigation water supplies, hydroelectric power generation, flood control and protection, recreation, and fish and wildlife; and

WHEREAS, the federal government has reaffirmed that the rights over use of water and priorities for such use shall remain the sole prerogative of the individual states; and

WHEREAS, excessive federal regulations, restrictions, and requirements can adversely affect the rights of the states to water use, preferences, and

priorities; and

WHEREAS, operation of man-made dams in Nebraska and other states has been consistent with state and federal requirements and individual state priorities for the beneficial use of surface water; and

WHEREAS, the federal Environmental Protection Agency has determined that dams should not be considered point sources of pollution to be made subject to additional stringent federal licensing and permit procedures under the federal Clean Water Act; and

WHEREAS, the federal district court of the District of Columbia on January 29, 1982, ordered that the Environmental Protection Agency must designate dams as point sources of pollution; and

WHEREAS, such designation will impose excessive restrictions, regulatory requirements, and costs on the operation and management of water projects involving dams, may lead to extensive future litigation, and may threaten future operations of dams for supplying water crucial to irrigation projects, hydroelectric energy production, and other beneficial purposes.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE EIGHTY-SEVENTH LEGISLATURE OF NEBRASKA, SECOND SESSION:

1. That designation of man-made dams as point sources of pollution is not necessary and will impose excessive federal restrictions, requirements, and

regulations on the operation of water projects to the detriment of the State of Nebraska and the United States; and

2. That additional federal regulation of water projects poses a threat to the sovereignty of the states in their exclusive rights regarding water use, priorities, and beneficial purposes in the future; and

3. That the Executive Branch of the United States Government is urged to appeal the January 29, 1982, decision of the federal district court of the District of Columbia, in the case of National Wildlife Federation vs. Anne Gorsuch, Administrator, U.S. Environmental Protection Agency; and

4. That the United States Congress is urged to enact legislation to specifically exempt dams as point sources of pollution under the National Pollution Discharge Elimination System (NPDES) of sections 301 (a) and 402 (a) of the Clean Water Act and Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. sections 1311 (a) and 1342 (a) to clarify the application of the Clean Water Act to dams, to render null and void the decision of January 29, 1982, and to prevent future litigation to determine dams as point sources of pollution; and

5. That the Clerk of the Legislature is directed to provide copies of this resolution with notification of its approval by the Legislature, to: All

97-999 O—82——74

members of the Nebraska delegation serving in the U.S. Congress; the Secretaries, Majority Leaders, and Minority Leaders of the United States Senate and U.S. House of Representatives; the U.S. Secretary of the Interior; the U.S. Attorney General; the Administrator of the U.S. Environmental Protection Agency; the President of the United States; and the Governor of Nebraska.

.....

PRESIDENT OF THE LEGISLATURE

I, Patrick J. O'Donnell, hereby certify that the foregoing is a true and correct copy of Legislative Resolution 256, which was passed by the Legislature of Nebraska in Eighty-seventh Legislature, Second Session, on the twenty-fourth day of March, 1982.

.....

CLERK OF THE LEGISLATURE

STATE OF SOUTH DAKOTA

HOUSE OF REPRESENTATIVES

PIERRE

February 27, 1982

To the South Dakota Congressional Delegation
Sen. Larry Pressler
Sen. James Abdnor
Cong. Tom Daschle
Cong. Clint Roberts

There is a need to amend PL 92-500 (Clean Water Act) to eliminate the application of National Pollutant Discharge Elimination System (NPDES) permits to discharges from reservoirs.

Apparently, recent action in the U.S. District Court for the District of Columbia makes this necessary. The decision in National Wildlife vs. Gorsuch issued on Jan. 29, 1982, ruled that EPA must adopt regulations and issue NPDES permits regulating the quality of discharges from reservoirs.

It is our opinion that this is unnecessary and harmful to the interests of South Dakota.

This matter reached us so close to adjournment, it was not possible to forward this to you in the form of a resolution. However, you have the sense of those of us in the leadership of this body urging you to act favorably on such amendments.

Sincerely,

Speaker of the House—

Majority Leader of the House—

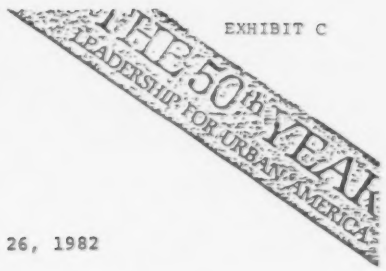
Asst. Majority Leader of the House—

Asst. Minority Leader of the House—

Asst. Majority Leader of the Senate

Majority Leader of the Senate

EXHIBIT C



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Mayor of Fresno
PETE WILSON
Mayor of San Diego
Executive Director:
JOHN J. GUNTHER

July 26, 1982

The Honorable John H. Chafee
Chairman, Senate Subcommittee on
Environmental Pollution
5229 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Chafee:

On January 29, 1982 a Federal District Court in Washington ruled that water may not be allowed to flow over, through and around the nation's 2.3 million dams unless authorized under a "point source" permit issued pursuant to the Federal Water Pollution Control Act ("FWPCA"). See National Wildlife Federation v. Gorsuch, 530 F. Supp 1291 (D.D.C.). In so ruling, the court concluded that all 2.3 million dams had been operated illegally for ten years and it flatly rejected the consistent, contrary interpretation of the law by four Administrations. As a result, the court ordered EPA to begin a crash program to

> "establish effluent limitations or other performance standards for dams ... and subject existing and proposed dams to all the National Pollutant Discharge Elimination System requirements applicable to other categories of point sources....."

320 F.Supp at 1314.

This ruling effectively turns upside down a decade-old public policy and practice. Dams and reservoirs have long been subject to a comprehensive web of environmental controls other than "point source" permits. (See, e.g., FWPCA §§208, 304(f), 401 and 404; Federal Power Act, 16, U.S.C. §791 et seq.; NEPA, 42 U.S.C. §4231 et seq.; and various state and local controls).

Thousands of the dams to be covered by the new court-ordered permit program are owned and operated by the nation's cities. Municipal dams and reservoirs

play an essential role in gathering and distributing water for domestic, agricultural and other purposes. Thus, the nation's cities are very seriously impacted by this court decree.

The U.S. Conference of Mayors strongly believes that any new control requirement for waters released by dams is both unnecessary and unwise. Accordingly, the Conference urges that the FWPCA be amended to make clear what we believe Congress always intended--that "point source" permits are not required for dams.

We believe such permits are unnecessary because the water released from dams and water resource reservoirs does not cause significant environmental problems. Moreover, in the very few instances where dams may impact downstream water quality, existing state and local controls have been sufficient to solve the problem.

In addition, we believe that it is terribly unwise for the federal government to launch a massive, new regulatory program such as that ordered by the court. In the difficult times of the 1980's, we all have far more serious problems to address than water flowing over dams--and yet far fewer resources to do the job. In the environmental area, for example, we already have much unfinished work in funding construction of publicly-owned sewage treatment plants, in renewing 40,000 industrial water pollution permits, in implementing the water pollution BAT requirements, and in implementing the new hazardous waste and Superfund legislation. In the broader social arena, we have a host of critical needs in the nation's cities.

The imposition of the court-ordered permit program for 2.3 million dams will grossly distort both national and municipal priorities. Moreover, the serious financial burden of such a new program for municipal dams will rob our financially-strapped cities of even further resources to do more important tasks.

For all of these reasons we urge the Congress to amend the FWPCA to reverse the impact of this court decision. Please include this letter in the official record of the Subcommittee's July 1982 hearings on this matter.

Sincerely,

John Gunther

John J. Gunther
Executive Director

cc Senator Robert T. Stafford
William M. Corcoran

EDISON ELECTRIC INSTITUTE

Written Testimony On
Clean Water Act Revisions, July 1982

INTRODUCTION

The Edison Electric Institute (EEI) and its 189 member companies believe the Clean Water Act can be improved significantly. Early last year, the Institute polled the environmental managers of its members to determine where the Act worked well, and where it needed refining. Based on the answers, EEI developed the proposals set forth in EEI's "Necessary Amendments to the Clean Water Act," dated March, 1982, a copy of which is submitted as an Appendix to this testimony. Though these proposals will not solve all problems in this complex field, they can improve the basic regulatory procedures and standards of the Act that are our tools for resolving environmental concerns.

EEI's proposals are not intended to weaken the Act. They should, in fact, reduce delay and direct EPA's efforts where they are most needed. In short, they can make the necessary process of protecting our environment more efficient, flexible, and fair -- without sacrificing water quality.

The Administration has forwarded to Congress a moderate and, on the whole, sensible set of proposals for amendments to the Clean Water Act. The Administration should be commended

for its balanced approach. EEI does not agree with all of the Administration's proposals. The bill also does not address other issues that it should. Nevertheless, we concur in most of EPA's proposals, and believe they are a good starting point.

Various environmental groups, such as the Natural Resources Defense Council, also support some of EPA's proposals while they dislike others. Clearly, the Administration's proposals defy classification as "pro-industry" or "pro-environment." This is because they attempt practical, not ideological, solutions to real problems. They should be evaluated on their merits and must not be turned into a political "football" in this election year.

This testimony will discuss the Administration's proposals first, then another revision EEI believes is needed but is not in the Administration bill. As for the Administration's proposals, the thermal variance provision and the clarification that releases from dams do not require NPDES permits, both of great interest to EEI, are discussed in detail. Briefly mentioned are two other Administration proposals EEI supports -- ten-year NPDES permits and realistic BAT and BCT deadlines. One EEI member in particular, Pacific Gas and Electric Company, also urges you to revise section 316(b) to provide clearly that any adverse effects of cooling water intake structures may be mitigated by a variety

of effective means, in lieu of requiring the application of particular intake structure "technology".

In two areas, EEI opposes the Administration's proposals. First, administrative imposition of civil penalties is simply unnecessary. Even if it were desirable, the failure to provide standard Administrative Procedures Act protections to alleged violators makes EPA's proposal unwise at best, and possibly unconstitutional. Second, the proposed felony provision is ambiguous. It fails to state clearly that the greatly increased sanctions shall apply only to "intentional violations of the Act occurring on a regular basis over an extended period of time that result in significant harm to the public health or the environment," as EPA has said was its intent. The Act already contains severe penalties for violations that are more than adequate in most cases. These drastic penalties should be limited carefully to cases of outrageous, reprehensible, and harmful conduct.

Besides commenting on these aspects of the Administration's bill, I will propose one other change not addressed in it. EEI encourages Congress to consider bringing the Clean Water Act into line with other environmental statutes, such as the Clean Air Act, by providing that issuance of an NPDES permit to a new source is not a "major federal action" requiring preparation of an "environmental impact

statement" ("EIS") under the National Environmental Policy Act ("NEPA"). As early as 1973, EPA's General Counsel also favored this change -- for sound reasons, as I will discuss later.

We hope you will give serious consideration to EEI's views, and to those Administration proposals which EEI supports. In particular, EEI hopes this Congress can enact appropriate amendments to the Clean Water Act this year. EEI and its staff look forward to working with the Congress toward better, more efficient regulation of our water resources.

STREAMLINING THERMAL DISCHARGE DECISIONS

A. Why Electric Plants Require Cooling Water

Generating electricity from fossil or nuclear fuels requires large amounts of water for cooling purposes. A typical plant uses fuel to boil water, producing steam that drives turbine-generators. After turning the generator, just enough heat is removed from the steam to condense it back to hot water. The hot water then is returned to the boiler, so its heat energy can be reused to produce more steam to drive the generator.

Cooling water is used to condense the steam and carry away its excess heat. Where a large enough waterbody is available, the most efficient method for disposing of the waste heat absorbed by the cooling water is to discharge the water

containing it back to the waterbody. The heat then is diffused through flow and current movements and dissipated to the atmosphere through surface heat transfer. This process is called open-cycle cooling.

B. Congress Required Technology-Based Controls on Heat in 1972

When the Federal Water Pollution Control Act was first passed, Congress was concerned about the environmental effect of discharging cooling water. It classified heat as a "pollutant" and required NPDES permits for its discharge. As a result, the Act's "technology-based" controls apply to heat, and require installation of "best available technology" (BAT) control measures for reducing heated discharges. Even then, however, Congress realized heat is not a normal pollutant, and its environmental effects might be far less than was then feared. Heat can alter the aquatic habitat, but dissipates rapidly to the atmosphere, is nonpersistent, and degradable. It is not a toxic substance, and does not react chemically with other substances, plants, or animals.

C. The Characteristics of Cooling Towers

Closed-cycle cooling systems, typically chosen by EPA as BAT, remove heat from cooling water. The standard off-stream system required is the evaporative cooling tower, either natural or mechanical draft.

Natural draft cooling towers are enormous concrete cylinders, roughly 300 to 550 feet in diameter and 300 to 600 feet tall. These hollow concrete shells, made famous by their profile at some nuclear power stations like Three Mile Island, cover an area equal to several football fields and can be as tall as 50 to 60-story buildings. Mechanical draft towers are composed of modules approximately 70 by 40 feet, placed side-by-side for distances up to 600 feet, roughly the length of two football fields.

Cooling towers have three negative characteristics:

1. Cost -- They are very expensive, costing between 30 and 75 million dollars (including energy penalties) for a single 1000 MW generating unit. Cooling towers reduce the generating efficiency and capacity of power plants, requiring up to 2% more fuel (another 50,000 tons of coal each year) and 3% more plant capacity to supply the same amount of electricity. A report prepared by ICF Incorporated for EEI in July 1982 estimates the savings that could result from EPA's proposed thermal variance amendments. It is submitted as an Appendix to this testimony.

2. Water Consumption -- They evaporate large quantities of water to dissipate heat to the atmosphere, consuming up to 250 percent more water than open-cycle cooling. This is particularly important in the more arid parts of the nation.

3. Adverse Side Effects -- They may sometimes cause ground level fogging, icing of nearby exposed surfaces in winter, cloud formation, precipitation, salt drift from plants using ocean cooling water, noise, aesthetic impact, and potential aviation hazards.

D. The Thermal Discharge Variance Provision

Recognizing heat is not like other pollutants and that cooling towers should not be required where they are not needed, Congress provided in the Act for thermal variances from the outset. Under § 316(a), open-cycle cooling or other control measures short of cooling towers can be allowed after detailed biological studies on the environmental effects of thermal discharges at a particular site. But even here, Congress did not allow costs, or the cost-benefit relationship, to be considered -- cooling towers can be avoided only if "a balanced indigenous population of shellfish, fish and wildlife" is preserved, regardless of cost.

.. Since 1972, over one hundred and fifty biological studies have been done at existing power stations. Those studies performed prior to 1978 cost over $30 million, and although no figures are available for expenditures since that date, the total now is substantially greater. Such studies often take years to complete, and it may be several more years before a variance request is decided. New sources generally have not sought variances, since cooling system design must be decided very early in their construction schedules, and such delay often is either impossible or too costly. Even when managements believe there will be no significant environmental harm due to a thermal discharge, they have been unable to delay

construction long enough to conduct the detailed biological studies required by § 316(a), to pursue a variance through the labyrinth of administrative procedures at both state and federal levels, and to obtain a decision under the uncertain and subjective test provided in the Act.

E. What We Have Learned About Thermal Effects

Ten years of intensive scientific investigation under the Act now show that the environmental effects from discharges of heated water are usually small and localized. As a result, variances for existing sources are usually granted. A summary of the status of all thermal variance requests by electric utilities is submitted as an Appendix to this testimony. Studies from more than 150 sites, and intensive investigation of thermal discharges at 23 sites, have shown thermal discharges dissipate quickly, and that the effects of thermal discharges on aquatic biota can be measured with reasonable accuracy when they occur, but in most instances are insignificant. These studies and investigations are summarized in a ten-volume set of reports submitted to EPA on behalf of the Utility Water Act Group, the Edison Electric Institute, and the National Rural Electric Cooperative Association in June 1978. Since that time, additional studies at other sites have confirmed the earlier findings.

Specifically, these investigations show:

1. Thermal discharges frequently produce effects so small as to be unmeasurable despite the use of sophisticated sampling techniques and statistical methods that show effects when they occur.

2. Where measureable effects occur, they generally are confined to a localized area and primarily consist of some species being attracted to, and of other species avoiding, the thermal plume itself due to differing temperature preferences of the species. Such effects seldom persist from one season to the next, or from one year to another.

3. No large-scale changes in population trends or species composition are attributable to thermal discharges.

These findings mirror those of an earlier report submitted by EPA to Congress, pursuant to § 104(t) of the Act.[1/] That report summarizes "the most comprehensive and objective environmental studies performed on the [actual] effects of thermal discharges" occurring at 52 power plants throughout the United States.[2/] The compilers of that report found that "the effects of thermal discharges from power plant sites are localized with little or no basis for generalization."[3/] They concluded, "The biological impact of

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1/ Senate Comm. on Public Works, 93d Cong., 1st Sess., Effects and Methods of Control of Thermal Discharges, Report to the Congress by the Environmental Protection Agency in Accordance with Section 104(t) of the Federal Water Pollution Control Act Amendments of 1972, (Comm. Print 1973).

2/ Id. at 28.

3/ Id. at 23.

temperatures [sic] increases of 1 to 5 [degrees] F, typical of mixing zones, appears to be small and generally confined to limited areas of the receiving surface water bodies."4/

EPA's rulings on § 316(a) variance "demonstrations" confirm these findings. According to a report prepared for EPA in February 1982, EPA and the various state NPDES agencies have approved or conditionally approved 162 demonstrations under § 316(a), while rejecting only 4 due to "insufficient information."5/

It is now documented that discharges of heated water simply are not the critical environmental problem feared ten years ago. Yet heat is still classified as a pollutant in the Act. Expensive technological controls such as cooling towers are still presumptively required, frequently to the exclusion of other more sensible heat dispersion techniques like diffuser pipes, cooling ponds and lakes, and careful siting of new open-cycle plants. Millions must still be spent on complex, individual biological proofs that almost always reach the conclusion of no significant injury to the aquatic environment.

4/ Id. at 27.

5/ Utility Data Institute, Inc., "An Update of the Status of Section 316(a) and (b) Applications," (February, 1982).

F. The Act Should Be Updated

It is time now to change the Act's thermal decisionmaking procedures to reflect our new knowledge. The Act should provide a simple, flexible, efficient way to avoid treating heat for treatment's sake.

If such changes are not made, existing sources may have to repeat expensive site-by-site biological "demonstrations" to continue their thermal variances, even where there is no reasonable probability of significant environmental harm. New sources as a practical matter will continue not to be able to seek such variances at all, even where warranted. According to a study by ICF Incorporated for EEI which is submitted as an Appendix to this testimony, the waste at plants now under construction or planned for service by 2000 will be on the order of $2 billion.

EEI would prefer to see cost considered in thermal discharge decisions, and to see all heat dispersion techniques considered when controls are necessary, not just cooling towers. But EEI concurs in and strongly supports the Administration's proposed reform of the thermal discharge variance provisions of § 316(a) as an important first step.

Full-length biological "demonstrations" should be required for a variance only when there is a reasonable possibility that a thermal discharge might cause significant

environmental harm. Thermal water quality standards to protect fish and wildlife were set under EPA supervision and must be reviewed by the states at least every three years. If they would not be violated by a thermal discharge, it is extremely unlikely the discharge would cause any significant environmental harm. The standards are a convenient, simple, relatively objective basis for determining, as a first cut, whether thermal discharges should be permitted. Thus, the Act should be amended to allow thermal discharge variances when a state's thermal water quality standards are not violated.

When such standards would be exceeded, permittees that wish to perform the traditional biological studies should be allowed to do so. As the Administration proposes, however, they should not have to show the continued presence of exactly the same "indigenous" population of aquatic organisms as would have resided in the area in the absence of a thermal discharge. Some species will avoid, and others will be attracted, to the warmer water. If Congress is unwilling to allow any cost considerations to enter into § 316(a) decisions, it should at least clarify that subtle, non-persistent effects such as these are not the sort of significant adverse environmental impact that should automatically mandate expenditure of society's limited resources on expensive, multi-million dollar cooling towers. The Act itself should not inflexibly prejudge the

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resource management question whether, given the need for electricity and the costs and detriments of cooling towers, a trout fishery or a bass fishery is best on a given stream. Nor should it require cooling towers beside a cooling lake or pond built expressly to receive thermal discharges, just because the fishery with the heat would be different (and frequently better) than the fishery without the heat.

Congress now has the information it needs to streamline thermal decisionmaking. It can provide a much more efficient procedure for deciding what types of control technology, if any, should be required for thermal discharges. It should, at the very least, adopt the Administration's thermal proposals.

NPDES PERMITS SHOULD NOT BE REQUIRED FOR RELEASES FROM DAMS

According to one environmental group and a United States District Court, "pollutants" are "added" to waters of the United States "from" a confined conveyance when impounded waters flow through or over dams.6/ If not reversed, this interpretation of the Clean Water Act might require this nation's 2.3 million dams to obtain National Pollutant Discharge Elimination System ("NPDES") permits from the Environmental Protection Agency ("EPA") or their state

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6/ National Wildlife Federation v. Gorsuch, 530 F. Supp. 1291 (D.D.C. 1982).

pollution control authorities. But is the NPDES program necessary to regulate water quality in dam releases?

It is true, of course, that storing water can affect its physical characteristics. In warm months, some reservoirs may stratify, forming stable layers of solar-heated warm water on top, cold water on the bottom.[7/] The upper layer absorbs oxygen from the atmosphere and typically has relatively high levels of dissolved oxygen.[8/] In some reservoirs that stratify, oxygen can be consumed in the lower layer (by organisms and decomposition of organic matter) faster than it is replaced, so dissolved oxygen levels there can be relatively low.[9/] Minerals from the reservoir basin may dissolve in stored water with low dissolved oxygen levels.[10/] And when stored water is released for use, it may pick up bottom sediments that previously had settled out,[11/] or if it falls

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7/ Dr. Orlob, a noted expert in hydraulics, hydrology, and water quality, testified in the National Wildlife Federation's litigation that this has happened at Lake Hartwell (Tr. of Nov. 4, 1980 at 111-114; Record, Doc. 86), but does not happen in other reservoirs such as Lake Tanneycomo. Id. at 142.

8/ Dr. Orlob said this happened at some reservoirs, such as Lake Hartwell (Tr. of Nov. 4, 1890 at 116-118), but does not happen at other reservoirs. Id. at 143-146.

9/ Testimony of Dr. Orlob, Tr. of Nov. 4, 1980 at 117-118.

10/ Id. at 118-119.

11/ Dr. Simons, an expert in hydrology and river mechanics, testified that intentional efforts to wash sediments through

(footnote continued)

into a deep pool from a height, it may pick up dissolved atmospheric gases in excess of normal concentrations.12/

But as Dr. Gerald Orlob -- an expert in hydrology and water quality -- has said, though these conditions can occur at specific locations, they do not constitute a prevelant nationwide problem. Indeed, all three of the experts with broad national experience in dam-induced water quality changes who testified in the National Wildlife Federation litigation on this issue said that the detrimental effects of dams on water quality in general are neither prevelant nor major.13/ The

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(footnote continued)

dams occur "infrequently" and rarely are successful when attempted. Tr. of Nov. 4, 1980 at 83-89. In general, reservoirs improve water quality by allowing suspended sediments to settle out. Id. at 65, 74-76.

12/ Testimony of Dr. Weitkemp, expert in supersaturation. Tr. of Nov. 4, 1980 at 208-209. Dr. Weitkemp also testified there are no major problems today with gas supersaturation. Id. at 225.

13/ The bulk of the trial testimony was given by Doctors Whitely (Transcript of Nov. 3, 1980 at 18-149), Simons (Tr. of Nov. 4, 1980 at 29-93), Orlob (Id. at 95-197), and Weitkemp (Id. at 199-232). Dr. Whitely, a biochemist (Tr. of Nov. 3, 1980 at 18) who testified for NWF and Missouri regarding a few examples of the effects of dam-related pollution in that state, specifically disclaimed any direct experience with dams outside of Missouri (except for one visit to Clark Hill Dam between Georgia and South Carolina -- Id. at 81-82) and disclaimed any expertise as to the physical processes causing that pollution (Id. at 24-26).

Dr. Orlob testified flatly, "No, I would not say that [low dissolved oxygen in reservoirs is a prevelant problem] . . . I

(footnote continued)

National Wildlife Federation itself admitted in answers to interrogatories that it knew of only nine dams nationwide that it believed actually caused water quality problems.14/ In short, the overwhelming evidence to date is that some dams can cause water quality problems, but those problems are relatively rare and site-specific. They do not raise significant national issues.

Even where problems occur, they are already being controlled by federal and state programs other than the NPDES program under the Clean Water Act. When Congress established the NPDES program in 1972, there already was a complex, integrated system for regulating the water quality effects of

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have endeavored to . . . select examples where there were . . . low oxygen levels in the system for reasons of illustration." Transcript of Nov. 4, 1980 at 167. Dr. Orlob was addressing the effects of thermal stratification, and his answer applies equally to the other conditions resulting from that process -- temperature variance and dissolved metals. Id. at 116-119 (Thermal stratification can cause oxygen depletion, which in turn can cause increased solubility of iron and manganese); at 163-164 (Release of colder water generally improves downstream water quality); and at 164 (In general, effects of dams on water quality are positive, not detrimental). Dr. Simons said "you have a better quality water in that there is in most cases less sediment released from the reservoir than occurred in the natural system." Id. at 65. As for supersaturation, Dr. Weitkemp testified, "I am not aware of any . . . major problem today." Id. at 222-225.

14/ NWF's Answers To Interrogatories, question 33 (Oct. 15, 1979).

dams, which several provisions of the new Act supplemented. Under section 9 of the Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. § 401), a federal license is required prior to construction of any dam in navigable waters. Permits also are required under section 404 of the CWA (33 U.S.C. § 1344), and for many dams, under the Federal Power Act (16 U.S.C. § 803(a)). A dam requiring a federal permit and having significant environmental effects is subject to the National Environmental Policy Act's Environmental Impact Statement requirements (42 U.S.C. § 4332(2)(C)), and to Council on Environmental Quality and Environmental Protection Agency regulations implementing those requirements. 40 C.F.R. Parts 6 and 1500 (1981).

No dam requiring a CWA § 404 permit may be constructed unless the state in which it will be built certifies that it will comply with the Clean Water Act's guidelines and standards -- including state water quality standards under CWA § 303 (33 U.S.C. § 1313). See CWA § 401, 33 U.S.C. § 1341). And the Fish and Wildlife Coordination Act of 1958 (16 U.S.C. § 661) requires federal agencies to consider wildlife conservation in developing water resources, and to consult with the Fish and Wildlife Service, Department of the Interior, to minimize damage to wildlife.

Dams also are subject to the requirements of State Areawide Waste Treatment Management Plans, adopted by the states under state law pursuant to CWA § 208 (33 U.S.C. § 1288), including the guidance published by EPA pursuant to CWA § 304(f)(2)(F) on the control of pollution resulting from "changes in the movement, flow, or circulation of any navigable waters." If states wish (and many do), they also may use their water quality standards as a means of controlling nonpoint source pollution. Such control makes much more sense than attempting to force the pollution associated with dams into the Procrustean bed of the NPDES program, since water quality problems unrelated to additions of foreign wastes are involved. The CWA emphasizes state control of nonpoint sources, since they are the entities most often capable of considering and acting upon the local land use and resource management goals necessarily involved with such sources.15/

15/ CWA § 101(b) (33 U.S.C. § 1251(b)) recognizes the "primary responsibilities and rights" of states to plan the development and use of water resources. This policy was affirmed in the 1977 amendments, which directed EPA and other federal agencies to cooperate with state agencies in development of "comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources." CWA § 101(g), 33 U.S.C. § 1251(g).

Congress already has mandated procedures to reduce this pollution. Section 304(f) of the Clean Water Act requires EPA to issue information including:

> (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from --
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> * * *
>
> (F) changes in the movement, flow, or circulation of any navigable waters . . . including changes caused by the construction of dams. . . .16/

The legislative history confirms Congress' intent that such water quality conditions to be treated and corrected through nonpoint source controls:

> The Committee . . . expects the Administrator to be most diligent in gathering and distribution of the guidelines for the identification of nonpoint sources and the information on processes, procedures, and methods for control of pollution from such nonpoint sources as . . . natural and manmade changes in the normal flow of surface and ground waters.17/

Shortly after passage of the Act, EPA issued the extensive guidance Congress ordered in § 304(f)(2)(F).18/ That guidance

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16/ CWA § 304(f), 33 U.S.C. § 1314(f) (emphasis added).

17/ H.R. Rep. No. 92-911, 92d Cong., 2d Sess. 109 (1971), reprinted in 1 Leg. Hist. at 796, (emphasis added).

18/ See EPA, "The Control of Pollution From Hydrographic Modifications" (Feb., 1977). A cover letter to that document

(footnote continued)

identifies many of the control techniques sought to be required under the NPDES program by the National Wildlife Federation. In short, the states already have authority to impose these controls. A nationwide permit program simply is unnecessary paper pushing.

These existing programs are effective when problems arise. For example, only two fish kills due to gas supersaturation have occurred in Missouri. Both occurred below then incomplete Truman Dam in 1978 and 1979.[19/] The Corps of Engineers thereafter completed construction of spillway deflectors at the site, and gas supersaturation has not caused fish kills in Missouri since.[20/] In fact, problems with gas supersaturation already have been solved nationwide.[21/]

(footnote continued)

notes that it includes:

> information on the identification and assessment of existing hydrologic modification nonpoint source problems; analysis and procedures needed for selection of controls; descriptions of individual systems of Best Management Practices (BMP); important considerations for predicting potential pollution problems from future hydrologic modifications activities and final [§ 208] plan format.

19/ Tr. of Nov. 3, 1980 at 55-69.

20/ Tr. of Nov. 3, 1980 at 99-100.

21/ Tr. of Nov. 4, 1980 at 220-222.

Similarly, a fish kill occurred below Stockton Dam when it was first put in operation due to low dissolved oxygen levels in releases from the dam.[22] The Corps of Engineers now has constructed a "skimming weir" that according to the Western District of Missouri "in large part corrected this problem."[23] The Corps of Engineers also has made extensive efforts to correct and control the dissolved oxygen deficiency below Table Rock Dam.[24] The Corps conducted a joint study with Missouri aimed at finding a solution, and specifically considered installation of an oxygen injection system.[25] And even though releasing sediments through "sluicing" is very rare to begin with, the record shows it has been discontinued at places such as Guernsey Dam in Wyoming, where it has caused problems.[26] These few examples -- including four of the nine "problem" dams cited by NWF -- show that the few problems that occur are being solved through existing regulations.

22/ Tr. of Nov. 3, 1980 at 53. For the first few years, oxygen levels in new reservoirs are atypically low due to the decay of inundated vegetation.

23/ State of Missouri ex rel. Ashcroft v. Dept. of the Army, 526 F. Supp. 660, 672 (W.D. Mo. 1980).

24/ Tr. of Nov. 3, 1980 at 50-52.

25/ Id. at 121-122.

26/ Tr. of Nov. 4, 1980 at 84-89.

Temperature variance and dissolved metals from dams do not cause fish kills. The change from a warm to a cold water fishery below a dam occurs gradually and without killing downstream aquatic populations.[27] The only problems caused by dissolved metals such as iron or manganese are stains -- red rust stains on plumbing fixtures with iron, black stains with manganese.[28] Even these slight problems rarely occur because municipal water supply intakes generally are located near the top of a reservoir where dissolved metals are in very low concentrations.[29]

Most of what is "possible" and "reasonable" to do in controlling the effects of dams on water quality already is being done, and very little else could be done even with a permit program.[30] But even if there were a need for further regulation of the effects of dams on water quality, the NPDES program, with its emphasis of nationally-uniform technology-based effluent limitations, is too inflexible to deal with them. The NPDES program requires imposition of a particular kind of effluent limitation -- one based on technology, without regard to resource management considerations.[31] Just because

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27/ Id. at 86-87.

28/ Exhibit 22 at 150-151 (testimony of Dr. Abernathy).

29/ Id. at 127.

30/ Tr. of Nov. 3, 1980 at 93-99.

31/ It is generally assumed that the NPDES program does not allow "effluent limitations" based on resource management or

(footnote continued)

it is feasible to subject a source to effluent limitations does not mean it should have effluent limitations based on how closely available technology can match existing stream conditions prior to construction of it, without consideration of water resource and wildlife management goals.

Dams are not the typical situation Congress had in mind for the NPDES program. Unlike standard industrial point sources, dams affect water quality indirectly -- by changing the size, depth and nature of the water body itself -- rather than directly -- by placing foreign substances in it. Many alterations of stream characteristics by dams are intended for beneficial resource management results, including provision of sediments for irrigated crops and cold water for trout. It is illogical to ignore these important differences from the industrial source paradigm in choosing the legal requirements to be applied to dams. Ideally, we should keep those effects

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(footnote continued)

water quality values rather than on available hardware. Once it is determined that "effluent limitations" must be applied to a source, the technological mandates also apply. Although effluent limitations more stringent than the minimum technological standard can be required based on water quality considerations (see sections 301(b)(1)(C) and 302), nothing in the Act would permit effluent limitations less stringent than the minimum technological standard based on water quality considerations. See Appalachian Power Co. v. U.S. E.P.A., 671 F.2d 801 (4th Cir. Feb. 8, 1982); Weyerhaeuser Co. v. Costle, 590 F.2d 1011 (D.C. Cir. 1978).

of dams on water quality we like and control the rest. But such choices cannot be made under the NPDES program -- all effects must be controlled to the limits of technological ability.

It makes no sense to resolve the complex resource management and water quality issues involved in dam construction and operation through the inflexible technological mandates of the NPDES program. For example, because available hardware could in some instances match the temperature of dam releases more closely to natural in-stream temperatures, application of the NPDES program to dam releases would require that it be done. But stopping cold water releases from many dams would eliminate valuable trout fisheries established on normally warm-water streams -- fisheries prized by fishermen and environmentalists alike. These effects should not be ignored in deciding the proper characteristics of dam releases -- as they must be under the NPDES permit program.32/

As a practical matter, EPA's bureaucracy is ill-equipped to license the 2.3 million dams, or even the 60,000 or so largest dams in this country that are subject to the Corps of Engineers' safety survey. Any effort to do so would divert

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32/ Appalachian Power Company v. U.S. EPA, 671 F.2d 801 (4th Cir. 1982).

EPA's limited resources from important environmental objectives -- such as setting and enforcing effluent limitations on toxic pollutants -- all for little or no "real world" environmental benefits. EPA has said as much to the United States District Court, which nevertheless felt constrained to enforce its interpretation of the current Act.

Dam operators must be certain of the legal consequences of their actions. The Act establishes severe civil and criminal penalties for willfull, unlicensed actions subject to the NPDES program -- including jail terms as well as fines. Congress should clarify that releases of impounded waters are not pollutant discharges requiring NPDES permits.

NPDES PERMITS SHOULD LAST FOR AT LEAST 10 YEARS

The Clean Water Act has been in effect for ten years. The five-year NPDES permits issued in the first round of permitting now are expiring, and a second round of permits is being issued. First-round permits required sources to meet effluent limitations based on the "best practicable" control technology, and generally more-stringent BAT requirements will be imposed in second-round permits. There are approximately 44,690 NPDES permits outstanding, and processing a single permit can take years--especially when contests or controversy arise--and tens of thousands of dollars. In some

circumstances, second-round permits now are being issued to dischargers whose first-round permits still are unresolved.

Both regulators and the regulated need greater finality and certainty. After second-round permits impose BAT and BCT requirements, no further stages of technology-based limitations will remain. The time has come to extend the permit term to at least ten years, as the House Subcommittee on Oversight and Review has recommended. The treadmill of permit applications and reissuance on which both permit agencies and permittees are running breathlessly is too time-consuming, costly and uncertain. The talents and energy devoted to this exercise in red tape and paperwork could better be devoted to other pressing environmental problems. Permits should last for at least ten years as the Administration has proposed.

One environmental group has opposed this change. It says extending permit terms to ten years amounts to "no further progress for a decade." Such arguments are red herrings. EPA currently uses "reopener clauses" to provide for incorporation of more-stringent technology-based limitations in the future, and certainly could do so in 10 year permits. In addition, EPA regulations specifically provide that issuance of new regulations may justify a permit modification.[33/] Cost-saving

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33/ 40 CFR § 122.15(a)(3) (1981).

innovations will be adopted by industry for obvious reasons without modified permits requiring it. Issued permits currently may be revised whenever new information subsequently indicates different permit conditions should have been imposed.[34/] Finally, even the stringent protections afforded by the NPDES program may be increased by the states pursuant to CWA § 510 under state law. In short, the objections to 10 year permits do not withstand scrutiny. We urge Congress to ignore these politically-motivated objections, and to extend NPDES permit terms.

CONGRESS SHOULD EXTEND THE BCT AND BAT COMPLIANCE DATES

The Act currently requires compliance with BCT and BAT limitations in most cases by July 1, 1984. EPA has acknowledged that at least three years lead time generally is required for compliance after BAT standards are set.[35/] Unfortunately, EPA has not set BAT standards for many industries, those BCT standards that have been set have been vacated, and few (if any) permits informing sources of their BAT limitations have been issued.

34/ 40 CFR § 122.15(a)(2) (1981).

35/ R. Sarah Compton, "Revised NPDES Second Round Permits Policy" (August 29, 1980), page 2.

To provide for orderly and efficient transition from BPT-level controls, the Subcommittee on Oversight and Review of the House Committee on Public Works and Transportation recommended that Congress extend the BAT compliance date to July 1, 1987. EPA has proposed extending it to July 1, 1988. The Edison Electric Institute supports these recommendations, and urges that the BCT compliance date be extended for the same reasons. However, compliance should be extended until three years after EPA promulgates applicable regulations, rather than to an arbitrary date. EPA often has found it impossible to promulgate complex regulations by fixed statutory deadlines, resulting in unnecessary litigation and the need for further legislative action. To avoid this in implementing BCT and BAT, compliance should be required within three years following adoption of implementing regulations by EPA. This would allow EPA time to issue the necessary regulations and permits, and industry time to design and install treatment systems efficiently and economically.

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SECTION 316(b) SHOULD CLARIFY THAT MEASURES TO MITIGATE THE EFFECTS OF COOLING WATER INTAKES MAY BE USED IN LIEU OF INTAKE STRUCTURE TECHNOLOGY

The Clean Water Act presently requires that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." The adverse effects caused by such intakes usually consist only of the "entrainment" of fish eggs and larvae (i.e., passing them through the plant's cooling system), or the "impingement" or "entrapment" of small fish against the intake screens. Clearly, Congress intended to mitigate these effects of cooling water withdrawals on nearby aquatic populations.

Unfortunately, if section 316(b) is read literally as some agencies have, it could be interpreted to allow mitigation only by means of technical modifications to the intake structure's location, design, construction, or capacity. Sometimes at existing sources, however, the same environmental objective can be achieved at lower cost through mitigation methods such as establishment of a fish hatchery or a fish stocking program. It makes no sense to require huge expenditures on technical modifications to the intake structures themselves when such other methods will serve just as well at a more reasonable cost.

Pacific Gas and Electric Company in particular urges Congress to revise section 316(b) to avoid any confusion on this issue, as follows:

> Any standard established pursuant to section 301 of this Act and applicable to a point source shall require (1) that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts, (2) that equally effective mitigation measures be applied to minimize adverse environmental impacts, or (3) that an equally effective combination of mitigation measures and modifications to the location, design, construction or capacity of cooling water intake structures be applied to minimize adverse environmental impacts.
>
> Any standard established pursuant to section 306 of this Act and applicable to a point source shall require that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts.

This proposal clarifies EPA's proposed amendment to section 316(b) as to existing sources by specifying that the effects of cooling water withdrawal may be controlled by alteration of intake structure, by mitigation measures, or by both.

ADMINISTRATIVELY-ASSESSED PENALTIES ARE UNNECESSARY

EPA has proposed amending § 309 of the Clean Water Act[36/] to expand its enforcement powers significantly. The Agency seeks authority to impose civil penalties on alleged violators of the Clean Water Act, of any permit or order issued under the Act, or of any implementing regulations. This power would supplement EPA's existing authority to issue compliance orders and to bring civil or criminal enforcement actions in federal district court.[37/] According to EPA, the amendment is intended to "minimize protracted litigation while ensuring due process and resolving issues . . . more efficiently and expeditiously" in cases of "clear and well documented violations . . . which may not be serious enough to require judicial enforcement."[38/]

The amendment would give EPA power to assess $10,000 per day of violation, up to $75,000. The Agency need only provide the alleged violator notice, and an opportunity for a hearing at which the Administrative Procedures Act (APA) protections usually used in administrative adjudications would not apply. The amendment does not specify any procedures that would be

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36/ 33 U.S.C. § 1251 et seq. (1977).

37/ 33 U.S.C. § 1319(a)(b)(c)(1977).

38/ EPA Section-by-Section Analysis Accompanying Proposed Amendments to Clean Water Act, p. 3, 1982.

required at such hearings. Although review of a final EPA assessment would be permitted in the appropriate United States district court, no standard of review is specified.

The Edison Electric Institute opposes granting EPA this additional enforcement authority for two reasons. First, EPA already has adequate enforcement authority and further expansion of it simply is unnecessary. Section 309 already authorizes EPA to issue orders requiring compliance with the Act, and to bring actions in court to enforce its provisions. Severe penalties -- up to $25,000 per day and one year in jail -- may be imposed, with even greater penalties for second violations. It is a simple matter to commence an enforcement action, and EPA certainly has not been reticent to do so. Moreover, many such actions are settled without extensive proceedings. Adding another administrative layer to these procedures may well decrease enforcement efficiency rather than increase it.

Second, even if administrative penalty assessment were needed, EPA's proposal is poorly conceived. Although EPA says it wants penalty assessment authority only in "less serious" cases that are "clearly documented," nothing in the provision would so limit its application. This opens the door to abuse. More importantly, EPA's proposal specifically states that the traditional adjudicatory procedures usually applied in

administrative hearings need not be supplied to persons accused by EPA of violating the Clean Water Act. Indeed, the proposal is absolutely silent as to what procedural protections will be afforded at administrative hearings, and what standard of review will be applied by the courts deciding appeals from administrative penalty assesssments.

"Due process of law" requires that accused violators be afforded essentially all of the procedural protections prescribed in the Administrative Procedures Act ("APA") for adjudicatory proceedings -- either at the administrative or judicial level. EPA's proposal gives no hint whether minimal agency proceedings followed by available de novo judicial review, or substantial agency proceedings followed by limited judicial review, is contemplated. It invites litigation over the adequacy of agency procedures and the appropriate standard of judicial review. This could be avoided by expressly requiring use of APA procedures at penalty assessment hearings, or by expressly providing for de novo judicial review.

THE PROPOSED FELONY SANCTIONS ARE UNNECESSARY, BUT IN ANY EVENT SHOULD EXPRESSLY APPLY ONLY TO INTENTIONAL VIOLATIONS, THAT ARE REPEATED AND CAUSE SIGNIFICANT HARM

The Clean Water Act already provides stiff penalties for violation of its provisions. Under section 309(c), even merely "negligent" violations are subject to penalties ranging from $2,500 to $25,000 per day of violation, and imprisonment for up to one year. Second violations may be punished by a fine up to $50,000 per day, and two years in prison. These same penalties are available to deter "willful" violations. Certainly the prospect of a prison sentence, or of large monetary penalties for continuing violations, is sufficient incentive to comply with the Act's requirements.

Feeling nevertheless that these penalties are inadequate punishment in egregious cases, EPA has proposed essentially doubling them for some types of violations. According to EPA, its proposal "is intended to address intentional violations of the Act occurring on a regular basis over an extended period of time that result in significant harm to public health or the environment. . . ."[39/] EPA says it is "not directed or intended to apply to isolated incidences of either unpermitted discharges or discharges exceeding permit limitations."

39/ See EPA's "Section By Section Analysis" at 3, emphasis added.

Unfortunately, nothing in the proposed amendment would limit its application to intentional, repeated, harmful violations.

Under EPA's proposal, the only prerequisite to imposition of what EPA has called "extraordinary punishment" for every violation is that the violator simply be aware that his act is likey to result in an unpermitted discharge of pollutants. Under this standard, a first-time backpacker who washes his cookware in a mountain stream commits a felony, for there is no requirement that discharging pollutants be one's conscious object or desire, no requirement that the discharge harm anyone or anything, and no requirement that the discharge be repeated. This is far too broad a range of conduct to expose to such "extraordinary punishment," with only EPA "prosecutorial discretion" to determine who goes to jail and who does not.

Although EEI believes more severe penalties are not needed under the Clean Water Act, if Congress disagrees it at least should carefully restrict such penalties to the egregious violations EPA desired to punish. Any "super" penalties should apply only to intentional violations (i.e., those in which it was the actor's conscious object or desire to dispose of pollutants illegally), that are repeated on a regular basis for an extended period, and that result in significant harm.

ISSUANCE OF NPDES PERMITS TO NEW SOURCES OUGHT NOT TO REQUIRE PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT

The Edison Electric Institute and its members encourage Congress to make the National Environmental Policy Act ("NEPA") inapplicable to the issuance of NPDES permits to new sources pursuant to the Clean Water Act by EPA. Most EPA activities presently are undertaken without adherence to procedures specified in NEPA.40/ NEPA's primary goal, the consideration of environmental factors by federal decisionmakers, is required as to most EPA actions by more specific statutes such as the Clean Air Act, the Resource Conservation and Recovery Act ("RCRA") and the Clean Water Act. As EPA has said, "EPA has the statutory authority to protect the environment, and NEPA is not needed to supplement this authority."41/ For that reason, EPA early took the view that NEPA ought not apply to issuance of NPDES permits to new sources.42/

40/ A memorandum from James A. Rogers, EPA Associate General Counsel, to Jeffrey G. Miller, Deputy Assistant Admininstrator for Water Enforcement (May 2, 1979) explains that absent an express statutory direction to the contrary, EPA does not believe NEPA applies to its activities.

41/ EPA General Counsel Opinion, "Application of NEPA to Activities of EPA," (Feb. 25, 1972).

42/ Id.

Congress already has expressly exempted many of EPA's environmental regulatory activities from the requirements of NEPA, including the issuance of permits under the Clean Air Act.[43/] EPA's actions under the Clean Water Act also are expressly exempted, except for construction grants for municipal treatment facilities and issuance of NPDES permits to new sources.[44/] Application of NEPA in the latter context simply is unnecessary. EPA has great substantive authority under other statutes over any air pollution, water pollution, or solid or hazardous waste disposal issues that may arise at a new plant. Though there is little for it to do, retaining NEPA's overlapping application is costly -- causing redundant proceedings, paperwork, and delay.[45/] Clean Water Act section 511(c)(2) should be amended to exempt issuance of NPDES permits to new sources from NEPA procedures.

Allowing EPA to consider a private facility's total environmental effects in the context of licensing its pollutant discharges is bad policy. While public access to NPDES proceedings can sometimes be constructive (as can early public input to the NEPA process), allowing a virtually unlimited

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43/ See note 47 below.

44/ CWA § 511(c)(2), 33 U.S.C. § 1371(c)(1).

45/ See note 46, below for a concrete example.

range of issues to be considered in that context would be highly destructive. Any litigious individual or group could delay, and add to increased expenses occasioned thereby, perhaps effectively block new industrial facilities on grounds unrelated to the NPDES permitted discharge and regardless of the merits of their claims. Moreover, to do so would duplicate work performed under other statutes by EPA and other agencies, with the possibility of conflicting results. For example, air pollution issues resolved once in granting a "PSD" permit under the Clean Air Act would be subject to relitigation and contrary findings under NEPA in a hearing on a new-source water discharge permit[46/] -- even though Congress apparently intended

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46/ This problem has already arisen at EPA. In the mid-1970's, Louisville Gas & Electric Company ("LG&E") planned a new coal-fired electric generating plant in Trimble County, Kentucky, and began obtaining the necessary governmental approvals for it. On April 19, 1977, EPA issued a "PSD" permit for the facility. No one sought judicial review of the permit within the 60 day period provided by Section 307(b) of the Clean Air Act, and it became final. In addition, LG&E applied for a "new-source" NPDES permit for the plant. Pursuant to EPA regulations, an EIS was prepared in the NPDES proceeding covering the plant's total environmental effects, not simply the environmental impacts of its pollutant discharges and cooling water intake structures. A group known as "Save the Valley" later disputed the validity of the NPDES permit EPA ultimately issued on the grounds, inter alia, that the EIS for the NPDES permit did not give adequate consideration to a large number of issues related to air pollution, including air pollution dispersion modelling techniques and control equipment. This resulted in further agency proceedings and hearings at which these air pollution issues were again considered.

the specific substantive provisions of the Clean Air Act, when applicable, to preempt the necessity for compliance with NEPA's more general procedural requirements.47/

NEPA's procedures to protect the environment are unnecessary when EPA issues NPDES permits to new sources. EPA already applies other substantive laws that accomplish that goal. But application of those procedures does produce substantial uncertainty, delay, paperwork and litigation. Congress should bring the Clean Water Act into line with the Clean Air Act by amending section 511(c)(2) so that issuance of an NPDES permit to a new source is not a "major federal action" triggering NEPA.

CONCLUSION

The Edison Electric Institute wishes to thank the Committee for this opportunity to present its views, based on the experience of its members with the Clean Water Act. EEI would be pleased to respond to any questions members of the Committee or its staff may have on these issues.

47/ Section 7(c)(1) of the Energy Supply and Environmental Coordination Act of 1974 states that "No action taken under the Clean Air Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969." Congress clearly did not feel that a facility's air emissions should be subject to repetitious evaluation and potentailly conflicting requirements under both the Clean Air Act and NEPA. Certainly this policy should not be thwarted through overly-broad application of NEPA to facilities which happen to require new-source NPDES permits.

NATIONAL WILDLIFE FEDERATION
1412 Sixteenth Street, N.W., Washington, D.C. 20036 202—797-6800

TESTIMONY OF DAVID G. BURWELL,
DIRECTOR OF SPECIAL PROJECTS, NATIONAL WILDLIFE FEDERATION
BEFORE THE SUBCOMMITTEE ON ENVIRONMENT AND POLLUTION
OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON S. 2652, THE CLEAN WATER ACT AMENDMENTS OF 1982

July 29, 1982

Mr. Chairman, my name is David G. Burwell and I appear today on behalf of the National Wildlife Federation (NWF). I am the attorney of record for NWF in the recent case litigated before the U.S. District Court of the District of Columbia, which held that pollutants discharged from dams must be regulated under the "point source" program of the Clean Water Act. National Wildlife Federation v. Gorsuch, 530 F. Supp. 1291 (D.D.C. 1982). The State of Missouri, which has experienced several extensive fish kills from such dam discharges, is a co-plaintiff in that case. I would like to direct my testimony exclusively to Section 14 of S. 2652, which would reverse that court ruling by simply excluding dams from the definition of "point source" contained in Section 502(14) of the Clean Water Act.

We urge that Section 14 be rejected by this committee. Dam discharges can, and do, kill fish, alter downstream aquatic habitat, and reduce the capacity of downstream waters to assimilate the discharge of pollutants from other sources. As more dams are built to provide for water supply, hydropower, flood control,

and other purposes, the severity of this problem will increase. Dam pollution must be addressed, not ignored.

When the present Clean Water Act was enacted in 1972, this Committee stated in its report to the floor that "... this legislation would clearly establish that no one has the right to pollute--that pollution continues because of technological limits, not because of any inherent right to use the nation's waterways for the purpose of disposing of wastes." The Administration's proposal to simply sweep the accelerating problem of dam pollution under the statutory rug by exempting dams from the point source program amends this statement to read, "No one has the right to pollute--except dam owners and operators." Such a reversal of public policy dishonors the stated purpose of the Clean Water Act to eliminate all sources of pollution, will require more costly clean-up measures in the future, and is totally unnecessary. With minimal good faith and due diligence, EPA can structure a solution to the problem quickly, at relatively low cost, and with substantial benefits in overall water quality as well as improvements in our nation's fisheries.

I would like to address five basic issues with respect to dam pollution: (1) the severity of the problem, (2) the number of problem dams, (3) the availability of technology to control the problem, (4) cost and benefits, and (5) the regulatory structure needed to target problem dams while excluding dams which cause no problems or which actually improve water quality. In each case, back-up material is attached to our testimony which we request be placed in the record.

1. Dam Pollution

Dam pollution is pollution caused by the existence of a dam/reservoir facility. It does not include pollution that enters a stream and is then simply discharged through the dam. Therefore, the only pollution that is covered by NWF v. Gorsuch is pollution that is added by the dam/reservoir facility itself. This limits the responsibility of dam owners and operators to control only the pollution caused by their activities, and does not apply to nonpoint source runoff into reservoirs and other activity over which they have no control.

Dams cause pollution in essentially two ways: First, by trapping previously free-flowing stream water behind a dam, they cause changes in the physical, biological, and chemical composition of the water. Second, the method of discharge of water through a dam can cause pollution, either by discharging water into deep stilling basins and trapping atmospheric gases in the water (gas supersaturation) or by discharging water located near the bottom of a reservoir through outlets near the base of a dam. These bottom-releases are often low in dissolved oxygen and high in sediments, dissolved metals, and muck. Natural lakes, on the other hand, do not discharge water from the bottom. The dam, therefore, is the direct cause of these pollutants in tailwaters.

The pollutants discharged from dams can have severe long-term effects on downsteam habitat and, on occasion, can kill fish outright before they are able to swim away from the discharge. Examples of these effects include:

1. Fish, like humans, require oxygen. Some fish such as trout and salmon need more oxygen than others, such as catfish and carp. However, for periods in the summer, and in some locations in the winter, the water at the lower depths of many reservoirs is deficient or even devoid of oxygen. If this poorly-oxygenated water is released through the dam, the downstream fishery is stressed and may even be eliminated. An example of the effect of oxygen-deficient releases from Buford Reservoir in Georgia on trout is included in Appendix A.
2. Oxygen-deficient releases also decrease the ability of downstream waters to assimilate pollution from other sources. Many materials discharged into our waters, such as sewage, have high biological oxygen demand (BOD). High BOD discharges are called conventional pollutants. To the extent to which dams release water deficient or devoid of oxygen, downstream waters can assimilate less of these conventional pollutants and still maintain minimum water quality. The "double whammy" of low-oxygen dam releases and high BOD releases downstream can destroy downstream fisheries.
3. Sediments in free-flowing streams are often trapped behind dams and can cause short-term improvements in water quality downstream. However, sediments which accumulate behind dams are often purposefully released in larges doses to prevent interference with turbine operation, to reduce seepage from irrigation canals downstream, or to slow filling of the reservoir itself by these sediments. When this happens, high levels of suspended sediments can interfere with fish and invertebrate respiration, reduce dissolved oxygen levels, and smother the benthic organisms on which fish feed. All these effects destroy habitat and kill fish.

4. Dams can dramatically alter the temperature of streamflow, lowering downstream temperatures up to 30°F. or, in the case of surface-release reservoirs on cold streams, raising the temperature. Temperature in free-flowing streams can rise and fall on a daily basis, while releases from steady-release dams generally change temperature slowly, but within far greater ranges. This change in temperature regime disrupts development cycles of many aquatic organisms and can substantially reduce the diversity of downstream ecology. The exaggerated temperature cycles renders some streams too cold for warm water fisheries during part of the year, but too warm for cold water fisheries during other parts of the year. Therefore, while these streams can sometimes support a put-and-take fishery, the establishment of a self-propagating fishery is impossible.
5. Where water is discharged on a store-and-release schedule (as in many hydropower projects), severe short-term temperature fluctuations occur downstream. Such rapid fluctuations cause thermal shock, which can stress or kill downstream biota, including fish.
6. Toxic compounds of iron, manganese, sulfur, and ammonia can form from the soil and decomposed matter under conditions of low oxygen in stratified[1/] reservoirs. When large concentrations of these compounds are released, aquatic life can be "toxic shocked." These compounds can also be taken in by fish and invertebrates, posing a danger to species higher up in the food chain. Dissolved metals also give water a metallic flavor and stain clothes, requiring treatment before they can enter municipal water supplies.

1/ See Appendix A for an explanation of stratification.

7. When water becomes supersaturated with atmospheric gases as a result of its discharge from dams, a disease very much like "the bends" can afflict the downstream fishery. "Gas bubble disease," as it is called, can kill fish in catastrophic numbers. One such release below the Truman Dam in Missouri in 1978 killed over 400,000 fish. Sublethal effects include internal hemorrhaging, blisters under the skin, reduced growth, and eye explosions. All of these effects can lead to death.
8. The combined effects of dam releases often reduce downstream diversity and total aquatic habitat. This, in turn, can reduce the size and extent of the insect population on which fish feed. When tailwater insects are reduced to only species of marginal food value, fish abandon that area of the stream.

The total damage to downstream water quality and the value of the downstream fishery of these dam discharges is unknown, but is significant. What is known is that (1) the value of our national freshwater sport fishery is well over $11 billion annually, (2) most streams are now regulated by dams, and (3) regulation of dam discharges to improve downstream water quality would produce substantial economic benefits. The U.S. Fish and Wildlife Service estimates that demand on our freshwater fisheries doubles about every 20 years. Regulation of dam discharges to produce the fisheries needed to meet that demand far outweigh the cost of regulation.

2. The Number of Polluting Dams

Determining how many dams pollute is difficult, partly because few streams are monitored for such pollution and partly

because the problem has received so little attention. The only time dam pollution becomes a public issue is when a massive fish kill occurs. However, just as the absence of a "body count" due to air inversions over New York City or Los Angeles doesn't mean air is clean, neither does the absence of massive fish kills mean dams don't pollute. Nevertheless, EPA's Chicken-Little estimate that over 2,000,000 dams will need permits if the NWF suit is not reversed is patently absurd. The pollution problems outlined above tend to occur in the larger dams, and power dams which discharge from the bottom. There are many ways EPA can reduce the universe of targeted dams requiring individual permits, giving general or areawide permits to the rest. This is precisely what a more responsive EPA did in 1977 when a similar suit resulted in an order requiring EPA to regulate discharges from feedlots and storm sewers.[2/] Rather than ask Congress for an exemption, EPA undertook a targeted program of regulation, hitting the problem discharges while issuing general permits for non-problem areas.[3/] When problem discharges are identified in a category covered by a general permit, an individual permit must be obtained.[4/] The entire regulatory program was grafted onto the existing point source program with little disruption of overall priorities or increase in staff. With minimal ingenuity, a similar program could be structured for dams.

2/ NRDC v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

3/ 40 C.F.R. §§ 122.57, 122.59.

4/ 40 C.F.R. § 122.59(b)(2).

There are many ways to cut the regulatory pie for dams. Using the data base created by the U.S. Army Corps of Engineers in response to the National Dam Safety Act, extensive information is already available on the approximately 68,000 dam/reservoir facilities that are over 25 feet in height and impound over 50 acre-feet of water. A screening process could reduce this figure much further. Reservoirs which stratify, causing low dissolved oxygen and high dissolved metals problems, tend to be over forty feet in depth with a total capacity of over 100 acre-feet. There are about 3,433 dam/reservoir facilities in this category. Temperature problems tend to exist in reservoirs with large surface areas. The U.S. Fish and Wildlife Service maintains an inventory of reservoirs with an average annual surface area of over 500 acres. There are about 1,600 reservoirs in this category. Dams which discharge from the bottom, causing low dissolved oxygen and high dissolved metals problems, tend to be hydropower facilities. There are only about 1,500 hydroelectric facilities in this country, with an equal number of sites considered promising for their hydropower potential.

Other problems, which cannot be categorized by the physical characteristics of dams, are easily controllable. For example, "sediment-flushing" from reservoirs is a completely purposeful discharge, and therefore is easily controllable. Vermont has already adopted a sediment release policy that has substantially reduced the damage caused by such discharges. Supersaturation is easily monitored and can be controlled by the installation of "spill deflectors" to reduce the velocity of

discharges. Other agencies, such as the Federal Energy Regulatory Commission, the Soil Conservation Service, the Bureau of Reclamation, BPA, and TVA, etc., all maintain extensive data bases on dams. By simply collecting and analyzing the data that already exists from these sources, EPA could establish general categories of problem dams almost immediately. A survey of dams in these categories could then further refine the process to identify immediate problems. While an accurate estimate of dams that need immediate attention is impossible, it is our "ballpark" guess that 1,000-1,500 permits would cover most existing problem dams.

3. Available Technology

It has often been said that necessity is the mother of invention. This principle is contained in the technology-forcing requirements of the Clean Water Act Amendments of 1972 and is equally true today with respect to dam pollution. Without controls on dam pollution, technology will evolve slowly or not at all. With controls, dam pollution control technology can be expected to advance quickly, and cheaply.

The Tennessee Valley Authority has recently demonstrated that ingenuity can provide very significant water quality improvements in dam discharges. TVA has a very significant problem with low dissolved oxygen discharges. While the Tennessee River ranks 10th in overall water quality among the nation's largest 25 rivers, it ranks 23rd in levels of dissolved oxygen (DO). TVA has labeled low DO discharges at seven of its

dams as presenting "critical" water quality problems, and discharges at seven more as presenting "major" water quality problems. (Appendix B)

TVA has tried many strategies to raise DO levels in dam discharges including multilevel intakes to selectively withdraw water from a particular reservoir level, direct aeration of turbine discharges using oxygen diffusers, tailwater weirs, turbine venting, and operational strategies. The costs, both in installation and in lost power generation, have gradually declined but are still significant. Generally, application of a technology that reduces power generation by over 3 percent of capacity is considered not cost-effective. However, TVA has recently experimented with a new technique using hub baffles that are installed directly on the turbines during normal maintenance. I have a full-size mock-up of one of these hub baffles with me today. After trying several designs, the curved baffle shown in this mock-up has proven the most effective. In fact, the results are extraordinary. Installation of these baffles on one hydropower unit at the Norris Dam in Tennessee increased the dissolved oxygen content of downstream waters by up to 3.0 parts per million (ppm) while reducing overall power generation capacity by only 0.3 to 0.5 percent. Since the recommended water quality standard for a high quality trout stream is 6.0 ppm, this improvement is very significant. The fact that it was achieved at so little cost in power generation capacity, and can be installed during routine maintenance, makes it a very promising

technology to control low DO discharges. TVA itself calls it a breakthrough of major significance.

TVA's recent success in the control of low DO discharges demonstrates the benefits that can be achieved from a focused dam pollution control program. These technologies can be used to address other dam pollution problems. Multilevel releases help control temperature. Spill deflectors and perforated bulkheads have largely controlled supersaturation problems in the Pacific Northwest. Operational controls, and dredging, can reduce sediment discharges. But these technologies are presently applied only in a haphazard manner, and new technologies are developed only after the problem is perceived as critical by an authority, such as TVA in the Southeast, or BPA in the Pacific Northwest, that has sufficient research and development capabilities to address the problem. The same problems, when experienced by smaller power authorities or individual private dam owners and operators, are ignored. Without a dam pollution control program, these technologies will not be developed and generally applied.

4. Costs and Benefits

The cost of applying dam pollution control technology is thin for the obvious reason that few technologies have been applied. However, what is known is encouraging.

The installation of spillway deflectors on dams in the Columbia River Basin has been estimated to increase the total number of returning adult Chinook salmon from 15,347 fish per 4.3 million smolt outmigrants to 45,382, an approximate

200 percent increase. The total number of returning adult steelhead trout for the same number of outmigrating smolts was estimated to increase from 41,409 to 60,965, over a 50 percent increase in return. Total costs are estimated at $9.1 million and total benefits over the 25-year life of the improvement at $47 - $126 million.5/

TVA has estimated the cost of turbine venting at the Norris Dam, using ring baffles and hub baffles, at $150,000, with maintenance costs of about $5,000 annually. Turbine venting alone is estimated to increase the economic value of the downstream coldwater fishery from $252,000/yr. to $395,000/yr., or an incremental annual benefit of $143,000/yr. Therefore, almost the entire capital cost could be recovered in the first year in the form of the increased value of the fishery. It should also be noted that this estimate is based on the use of a more angular baffle that was not as efficient in increasing dissolved oxygen levels as the curved baffle I have brought along today. In combination with improvements in flow and the construction of a reregulating jetty downstream (at a cost of about $900,000), incremental benefits are estimated to increase to $497,000/yr. If the value of lost power generating capacity is considered, benefits would be reduced by about $65,000/year. However, if the baffles can be removed when low DO discharges are not a problem, the cost in lost generating capacity can be further reduced. In any event,

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5/ Status Report--1978: The Snake River Salmon and Steelhead Crisis: Its Relation to Dams and the National Energy Shortage, NOAA (1979), pp. 24-27. See additional material in Appendix C.

the recent improvements in the efficiency of hub baffles means that low DO discharges can be controlled at a net economic benefit to the community served by the project.[6/]

Probably the most sophisticated study of the value of controlling low DO discharges was conducted by the State of Missouri with respect to the trout fishery in Lake Taneycomo, below Table Rock Dam. Lake Taneycomo is the only tailwater trout fishery in Missouri, Illinois, Iowa, or Kansas. The socioeconomic value of the fishery is estimated at $9.9 million annually. The lost value of the fishery due to DO depletion from Table Rock Dam is estimated at $300,000 - $500,000/year. This loss could be eliminated through the construction of weirs or multi-level release structures to allow high DO surface releases from Table Rock Reservoir. A multi-level release structure was recently completed by the Bureau of Reclamation at the Flaming Gorge Dam in Utah at a cost of $4.6 million. At a similar cost at Table Rock Dam, it would take approximately 10 years to recover the capital cost of the improvement in the form of an improved fishery.

This is the best information presently available on the cost of dam pollution control technology. However, the available data, sketchy as it is, indicates that verifiable net economic benefits result from the control of pollution from dams.

5. The Regulatory Structure

No new statutory structure is needed to control dam discharges. As stated above, the regulatory structure presently

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6/ TVA, Improving Reservoir Releases (Dec. 1981), pp. 12-21, plus TVA briefing of July 22, 1982.

adopted for separate storm sewers provides a blueprint for the type of program an imaginative EPA could adopt for dam pollution control. Several categories of dams have been suggested that would target problem dams. These categories could be based on dam characteristics such as dam height, reservoir capacity, location of the discharge outlet at the bottom of the dam, etc., or on geographic characteristics such as elevation, latitude, extent of drainage basin, etc. When general permits are issued to broad categories of dams, a provision could be included that would require individual permits for certain problem discharges that would otherwise fall under the general permit. Such a provision is already contained in EPA's storm sewer regulation. See 40 C.F.R. § 122.59(b)(2). Certain intentional discharges--such as the sluicing of sediments through dams--should be regulated regardless of dam characteristics. In order to help EPA identify problem dams, we attach an outline of the type of information needed to further refine the universe of dams within certain categories to target the discharge of specific pollutants. (Appendix D)

We do recognize that economic considerations are important. Therefore, if any legislative action is appropriate, we suggest that it be limited to the simple statement that effluent limitations for existing dams be set at best practicable control technology (BPCT) pursuant to Section 301(b)(1)(A) of the CWA, allowing the costs of the technology in relation to the probable

benefits to be considered in the establishment of the effluent limitation guidelines under Section 304(b)(1)(B). All new dams would be required to meet Best Available Control Technology under Section 306(b). Economic considerations are still considered under BACT pursuant to Section 306(b)(1)(B) which allows the EPA Administrator to include economic considerations in developing new source performance standards.

Dam pollution will not go away. To the contrary, with the new emphasis on hydroelectric power generation as an economically attractive source of energy, we can anticipate renewed interest in dam construction. Also, as existing dams age, the reservoirs behind such dams get filled-in with silt and collect nutrients which cause them to eutrophy. We can therefore expect existing dams to discharge an increasing quantity of pollutants in the future.

In conclusion, the economic benefits that result from control of dam pollution are direct and verifiable. Apart from the aesthetic and human health benefits that can be achieved through the control of dam pollution, the stimulation to our $11 billion/year freshwater fishery alone that would result from such action more than justifies the effort. We ask that you let the decision of the federal court stand and direct EPA to finally address this significant water quality problem.

Thank you.

APPENDIX A
DAMS AS POLLUTERS

Dams can have significant adverse effects on water quality. Much research has been done on the problem, and much is now known about the specifics of water quality associated with reservoir releases. This fact sheet describes generally what is known about these effects.

I. Reservoir Conditions

Downstream water quality is dependent upon the condition of water in the reservoir, since the reservoir is the immediate source of the water. The chief factor determining the quality of the discharge is the extent to which the reservoir is stratified.

Reservoirs stratify thermally during summer by the formation of an upper layer of warm water and a deep layer of cold water, with a transitional layer in between. Reservoirs destratify in late summer and early fall when the surface water cools, becomes more dense, and mixes with lower layers as it sinks. Water sinks because water at 4°C.(39°F.) is heavier than water at greater or lesser temperatures (water freezes at 0°C.). During summer stratification, the deep waters are a constant 4°C. while the surface waters are at higher summer temperatures. Stratification can also occur in the winter in particularly cold locations where the surface temperature stays near freezing.

Stratification creates downstream water quality problems because water at the bottom of a reservoir loses oxygen, stays near 4°C., and provides potential for increasing the solubility of metals. If this degraded deep water goes through the dam, it remains near that temperature, low in oxygen and potentially high in dissolved metals.

II. Downstream Effects Caused by Stratification

A. Temperature

Thermal changes as a result of dam discharges can result in altered or depleted aquatic life for distances as great as 50 miles downstream. Air temperature, water volume discharged, ground water and tributary additions, shade, and stream bottom conditions, all determine the extent to which altered temperatures affect aquatic life. Altered temperatures eliminate many organisms from habitats where they might otherwise survive. Some aquatic life forms have temperature requirements so narrow that temperature changes of as little as 1°C. can affect their existence.

Surface water release dams on warm water streams generally provide for well-oxygenated tailwaters at, or near, normal water temperature. Warm water aquatic communities and the associated fisheries are well adapted to such tailwaters. However, surface water releases from reservoirs built on cold water streams increase summer water temperatures in the tailwaters and stress or eliminate cold water fish and other aquatic forms. Water temperatures are lowered below deep water release dams built on warm water streams. Change in the aquatic

community is usually more pronounced in rivers subject to deep water discharges than in rivers subject to surface water releases or in rivers below non-stratifying reservoirs. Discharges from deep release dams on warm water streams may result in temperatures as much as 20°C. lower than the temperatures of similarly located unregulated streams.

In addition, seasonal temperature changes are delayed below reservoirs because it takes more time to cool or warm a reservoir than it takes to cool or warm an unregulated stream. Therefore, water temperatures fluctuate on a daily and seasonal basis in unregulated streams, while temperatures in tailwaters of dams are more nearly constant. Such uniformity can affect the normal cycles of stream-dwelling organisms which are adapted to conditions in an unregulated stream.

On the other hand, where water is discharged on a store-and-release schedule (characteristic of hydropower projects where water discharge depends on power demand), severe water temperature fluctuations occur downstream. Too rapid temperature alteration can result in thermal shock to aquatic life.

B. Dissolved Oxygen (DO)

Low dissolved oxygen is rarely a problem below surface release reservoirs because surface waters are usually well oxygenated. In contrast, in deep release, stratified reservoirs, biological decomposition of organic matter on the bottom may reduce or totally eliminate oxygen. When such waters are released downstream, the amount of oxygen they carry may not be sufficient to maintain aquatic life, such as fish

which depend on well-oxygenated water. In addition, such releases may not provide sufficient oxygen to assimilate oxygen-demanding pollutants discharged downstream, such as those resulting from domestic or industrial pollution. These other pollutants, categorized by their Biological Oxygen Demand (BOD) further deplete the oxygen content of the water.

Low DO rarely kills fish because fish are able to sense the condition and move away. It can directly kill aquatic organisms by suffocation, or it can retard growth and decrease resistance to disease. Over an extended period of time, aquatic life forms tolerant to low oxygen levels often replace the highly diverse natural aquatic communities in degraded tailwater communities.

C. Toxic Compounds

Bottom release discharges may contain high concentrations of compounds of iron, manganese, sulfur, and ammonia which form from the soil and decomposed organic matter under conditions of low oxygen. High concentrations of such materials can be toxic to aquatic organisms by themselves or in combination. They become dangerous when their solubility is increased by a reduction reaction in the absence of oxygen. The soluble form is more easily taken in by fish, invertebrates, and municipal water supplies. It is a toxic threat to each. Such materials are not present in unaltered streams. When large concentrations of these compounds are suddenly released, such as may happen at hydroelectric dams, aquatic life can be "toxic shocked."

III. Downstream Effects Not Caused by Stratification

A. Sediments

Reservoirs act like large settling basins in which the sediment load carried by the stream settles to the reservoir bottom. Therefore, water released from dams is relatively sediment free. Large amounts of sediment accumulate in reservoirs and at the base of dams, often affecting power production or reservoir capacity. These deposits are occasionally removed by dredging or can be sluiced downstream. When this happens, large amounts of suspended materials may be released downstream, smothering bottom-dwelling organisms as well as suffocating fish. In addition, sediments released in great quantities may cover over much of the streambed habitat necessary for stream dwellers.

A process known as scouring is the result of normal dam operations. The discharge, low in sediment as it passes through the dam, will pick up sediments from the downstream streambed and carry them away. Thus, most flow regimes suspend and resuspend sediments on a regular basis. This can lead to a highly unstable environment for aquatic life; bottom dwellers are in constant danger of being carried downstream or smothered as sediments are scoured away and settled during high- and low-flow periods.

B. Gas Supersaturation

As dam discharges pass over dam spillways, water becomes mixed with air bubbles. This mixture is carried into the stilling

basin. Increased pressure which exists in deep stilling basins forces the air bubbles to diffuse into the water to an extent that would not normally occur. Fish cannot detect this extraordinarily high gas content (oxygen and nitrogen) and continue to breathe normally. The supersaturated gases come out of solution within the fish, and bubbles form under the skin and in other parts of their bodies, often causing stress or death. This is called "gas bubble disease."

Gas supersaturation has the most dramatic effect on downstream ecology, occasionally causing large-scale fish kills. An example of this occurred at the Harry S. Truman Dam in Missouri in the spring of 1978. Over a short time, an estimated 421,785 fish valued at $168,350 were killed by gas bubble disease. Even when it is not fatal, it can cause behavioral changes, reduced growth, hemorrhages, reduced endurance, and bubbles and blisters in gill blood vessels and under the skin. It was a chronic problem in the Pacific Northwest in the 1970's.

IV. Downstream Aquatic Communities

In evaluating the ecological consequences of dam releases, one could look only at the "body count" of fish kills in order to determine the magnitude of the problem. This would be inappropriate, because most of the effects are not immediately toxic to fish. Fish can, and do, sense water degradation and move away from the source to a more hospitable place in the river. The effects are significant in their slower, accumulated effects on downstream organisms.

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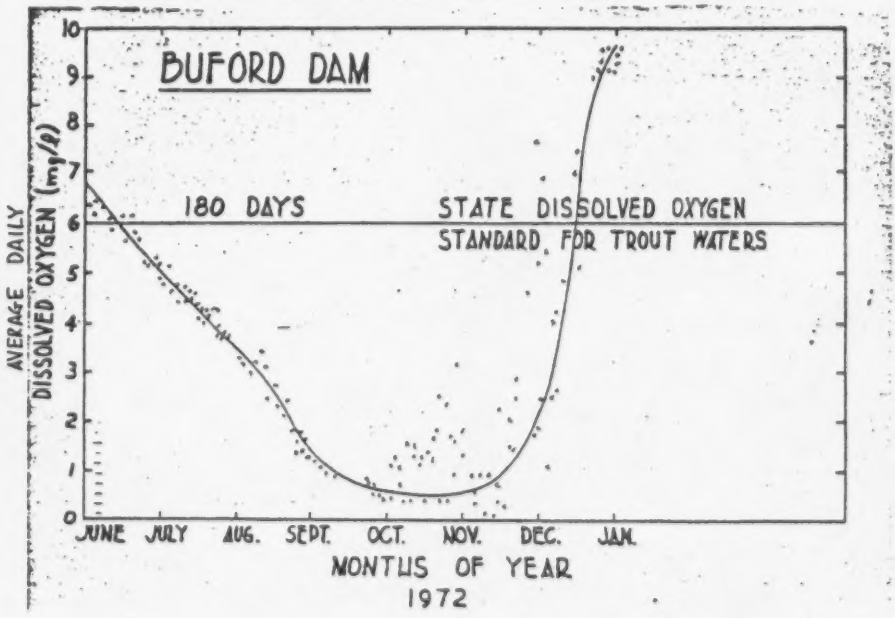
Many ecological communities downstream from dams have been found to be suffering from environmental stress as a direct result of one or more of the previously discussed effects. Biologically, environmental stress is assessed on the basis of species diversity and redundancy. A community which is not stressed has a large number of different species with a moderate number of individuals of each species. Tailwater communities generally live in a degraded environment which only a few highly resistant species can tolerate. Because these species have little competition for the resources, they will thrive, often containing more individuals than a similar, non-degraded community. However, few other organisms can survive these conditions. Thus, most tailwater communities are ecological "dead ends,"providing no benefits for any other potential member of the food chain. For that reason, scientists have concluded that conditions downstream from some dams are similar to conditions found downstream from sources of organic pollution.



APPENDIX B

DISSOLVED OXYGEN PROBLEMS IN THE TENNESSEE VALLEY AND THE SUSQUEHANNA RIVER BASIN

TABLE 1. CRITICAL AND MAJOR WATER QUALITY PROBLEM AREAS IN THE TENNESSEE VALLEY

Stream or reservoir	Location	Nature of problem	Map key[a]
Critical problem areas			
Point source problems			
Holston River	Kingsport, TN, to Cherokee Dam	Municipal, industrial	10
Pigeon River	Canton, NC, to Douglas Lake	Industrial	11
Chattanooga South Chickamauga-Citico Creeks	Chattanooga, TN	Municipal, industrial	6
Nonpoint source problems			
Huntsville Spring Branch-Indian Creek Embayment	Huntsville, AL	DDT	7
North Fork Holston River	Saltville, VA, to TN/VA state line	Mercury pollution	1
Ocoee River	Copperhill, TN, to mouth of Hiwassee River	Suspended solids, pH, metals	2
North Toe-Nolichucky Rivers	Spruce Pine, NC, to Nolichucky Dam	Suspended solids	3
Emory River and tributaries	Above Harriman, TN	Acid coal mine drainage, suspended solids	4
Clinch-Powell River and tributaries	Southwest VA	Acid coal mine drainage, suspended solids	5
First, Second, Third, and Fourth Creeks	Knoxville, TN	Urban runoff	9
Generic problems			
Norris	Clinch River Mile 79.8	Dissolved oxygen	32
South Holston	South Fork Holston River Mile 49.8	Dissolved oxygen	34
Nottely	Nottely River Mile 21.0	Dissolved oxygen	36
Douglas	French Broad River Mile 32.3	Dissolved oxygen	40
Chatuge	Hiwassee River Mile 121.0	Dissolved oxygen	41
Cherokee	Holston River Mile 52.3	Dissolved oxygen	42
Tims Ford	Elk River Mile 125.3	Dissolved oxygen	45
Major problem areas			
Point source problems			
Hominy Creek	Asheville, NC	Municipal, industrial	12
East Fork Poplar Creek	Oak Ridge, TN	Municipal	13
Pistol Creek	Alcoa, TN	Industrial	14
South Mouse Creek	Cleveland, TN	Municipal, industrial	15
Chestnuts Creek	Athens, TN	Municipal	16
Sweetwater Creek	Sweetwater, TN	Municipal	17
Wolftever Creek	Collegedale, TN	Municipal, industrial	18
West Chickamauga Creek	Chickamauga, GA	Municipal	19
Rock Creek	Tullahoma, TN	Municipal	20
Duck River	Shelbyville, TN	Municipal	21
Duck River	Columbia, TN	Municipal	22
Big Rock Creek	Lewisburg, TN	Municipal	23
Shoal Creek	Lawrenceburg, TN	Municipal, industrial	24
Swan Creek	Athens, AL	Municipal	25
Wheeler Lake	Decatur, AL	Industrial	26
Pond Creek	Muscle Shoals, AL	Natural pollution, municipal, industrial	27
Beech River	Lexington, TN	Municipal	28
Trace Creek	Waverly, TN	Municipal	29
East Fork Clarks River	Murray, KY	Municipal	30
East Fork Clarks River	Benton, KY	Municipal	31
Nonpoint source problems			
Chestuee Creek	Above Englewood, TN	Runoff from agricultural land	8
Generic problems			
Fort Patrick Henry	South Fork Holston River Mile 8.2	Dissolved oxygen	33
Blue Ridge	Toccoa River Mile 52.0	Dissolved oxygen	35
Fontana	Little Tennessee River Mile 61.0	Dissolved oxygen	37
Watauga	Watauga River Mile 25.8	Dissolved oxygen	38
Boone	South Fork Holston River Mile 18.6	Dissolved oxygen	39
Fort Loudoun	Tennessee River Mile 602.3	Dissolved oxygen	43
Watts Bar	Tennessee River Mile 529.9	Dissolved oxygen	44

[a]Numbers correspond to numbers on centerfold map.

TABLE 4. THERMAL STRATIFICATION OF MAJOR TENNESSEE VALLEY RESERVOIRS

Extent of stratification	
Strong	**Weak, destratified**
TVA mainstem reservoirs	
	Fort Loudoun
	Watts Bar
	Chickamauga
	Nickajack
	Guntersville
	Wheeler
	Wilson
	Pickwick
	Kentucky
TVA tributary reservoirs	
South Holston	Wilbur
Watauga	Fort Patrick Henry
Boone	Nolichucky
Cherokee	Melton Hill
Douglas	Apalachia
Fontana	Ocoee No. 2
Norris	Ocoee No. 1
Chatuge	Bear Creek
Nottely	
Hiwassee	
Blue Ridge	
Ocoee No. 3	
Normandy	
Tims Ford	
Little Bear Creek	
Cedar Creek	
Upper Bear Creek	
Aluminum Company of America Reservoirs	
Thorpe	Cheoah
Nantahala	Calderwood
Santeetlah	
Chilhowee	

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Table 1

Comparison of Tailwater Conditions With and Without Turbine Venting

Project	Dissolved Oxygen (DO) Criteria (mg/l)	Average Number of Days Per Year DO Criteria Not Met[1]	Average Annual Minimum DO (mg/l)[1]	River Miles Not Meeting Criteria[1, 4]	Average Number of Days Per Year Downstream DO Criteria Would Not Be Met Assuming Maximum Turbine Venting Potential[4]	DO Deficit (mg/l)[4,8]
Tims Ford	6.0	192/159/109	0.4/1.9/3.4	49/39/28	38	4.0/2.8[9]
Norris	6.0	130/98/55	0.9/2.4/3.9	13.5/13.5[3]/13.5[3]	35 to 0	2.7/1.6[9]
Boone/Fort Patrick Henry	6.0	121/70/6	3.3/4.8/6.3	5/2/0	0	2.0/0.6[10]
South Holston	6.0	107/75/44	1.5/3.0/4.5	11/9/5	0	2.1/1.1[11]
Blue Ridge	5.0	68/7/1	3.3/4.8/6.3	4/1/0	0	1.3/0[7]
Nottely	6.0	123/96[2]/53[2]	1.0/2.5/4.0	14.5/14.5[5]/8[5]	-	1.3/0.5
Chatuge	6.0	149/102/61	0.8/2.3/3.8	8/7/4	0	1.4/0.6[11]
Apalachia	6.0	65/5[2]/0[3]	4.6/6.1/7.6	2/0/0	-	0.7/0[7]
Cherokee	5.0	147/109/82	0.2/1.7/3.2	47/47[6]/47[6]	70 to 0	3.3/2.4[9]
Douglas	5.0	138/95/57	0.5/2.0/3.5	27/27[7]/27[7]	42 to 0	3.0/2.7[9]

1. Indicated parameter without turbine venting/projected parameter with turbine venting assuming a 1.5 mg/l increase/projected parameter with turbine venting assuming a 3.0 mg/l increase.
2. Contingent upon further tests on the vacuum breaker system.
3. Only 13.5 miles of unregulated stream.
4. Assumes maximum discharge through turbines.
5. Only 14.5 miles of unregulated stream.
6. Only 47 miles of unregulated stream.
7. Only 27 miles of unregulated stream.
8. Assumes 1.5 mg/l DO increase with turbine venting.
9. Ten miles downstream.
10. One mile downstream.
11. Five miles downstream.

SUSQUEHANNA RIVER FISH KILL

of

JULY 8, 1980

MARYLAND DEPARTMENT

of

NATURAL RESOURCES

TIDEWATER ADMINISTRATION

TIDAL FISHERIES DIVISION

JULY 23, 1980

Plaintiffs' Exhibit 52

A fish mortality involving white perch, striped bass, Atlantic menhaden, and carp, occurred in the Susquehanna River below Conowingo Dam sometime during the period from sunset on July 7, 1980 to sunrise on July 9, 1980. An estimated 16,959 white perch, 1310 striped bass, 1208 menhaden and 162 carp died between 0300 and 1500 hours on July 8, 1980. Low levels of dissolved oxygen is believed to be the cause of the mortality.

A second mortality occurred on or about July 8, 1980 at the mouth of the Susquehanna River involving menhaden predominantly, but also gizzard shad and channel catfish. An estimated tens of thousands of dead menhaden were observed in the area of the river mouth and flats. This mortality continued at a low rate following July 8 but is expected to end over the next two weeks. A similar mortality occurred in the same area following a large river herring mortality in the Susquehanna River below Conowingo Dam in May - June 1971.

PROCEDURES

The presence of dead white perch, striped bass, carp and other resident species floating in the vicinity of Port Deposit, Cecil County, Maryland, was reported to the Tidal Fisheries Division during the morning of July 9, 1980. Fisheries biologists investigated the report that afternoon. The biologists made species counts on 16.6 acres of open water transects and 1120 feet of shoreline. Observations were made where actual counts could be recorded. The field investigation was conducted adhering as closely as

physical limitations allowed to the Fish Kill Counting Guidelines set forth by the American Fisheries Society Pollution Committee in 1979. Four representative lengths of shoreline and three areas of open water were selected as counting stations, their dimensions were recorded and the dead fish within these areas were counted by size and species (Table 1). The development of the data was also conducted according to the procedures set forth in the Guidelines (Table 2). Total count data is calculated by determining what portion of the area involved in the kill is represented by the selected areas. The count in the selected area was expanded to the total area. The resultant number of fish killed is considered conservative, because only areas where dead fish were observed are included in the statistical expansion.

Dissolved oxygen, temperature, and water release information was retrieved from monitoring equipment operated by ERM, Inc. for the Department of Natural Resources Power Plant Siting Program, and correlated by the Tidal Fisheries Division. Dissolved oxygen and temperature information was provided for the Conowingo intake water from the reservoir, the Tailrace at the north end of Rowland Island .18 miles below the Dam, and at the north end of Roberts Island 3.33 miles below the Dam. Water release records were provided by the U.S. Geological Survey. Similar records were furnished by the Susquehanna Electric Company on July 23, 1980.

Findings

Dissolved oxygen content information and water release information indicates that levels of dissolved oxygen potentially lethal to fish existed in the Tailrace near Rowland Island for the period

from 0200 through 0900 hours July 8, 1980 (ERM Inc.). During this time the D.O. level was 2.1 parts per million (ppm) or below, for eight consecutive hours and was recorded at 1.9 ppm for five of those hours (ERM Inc.). This period of low dissolved oxygen occurred at the midway point of an approximate fifteen hour water release shutdown and continued until water was released at about 1000 hours on July 8, 1980. Records supplied by the Electric Company show similar flow releases and shutdown periods and also potentially lethal low levels of dissolved oxygen.

The Conowingo Hydroelectric Facility releases water when their environmental consultants detect low dissolved oxygen levels in the Tailrace water. Releases for this purpose apparently occurred during the nights of July 4, 5 and 6. No releases occurred during the ten hour shutdown of the night of July 7, the 15 hour interval of the night of July 8 or the post mortality 16 hour shutdown of the night of July 9.

APPENDIX C

COSTS AND BENEFITS

OF SELECTED

DAM POLLUTION CONTROL TECHNOLOGIES

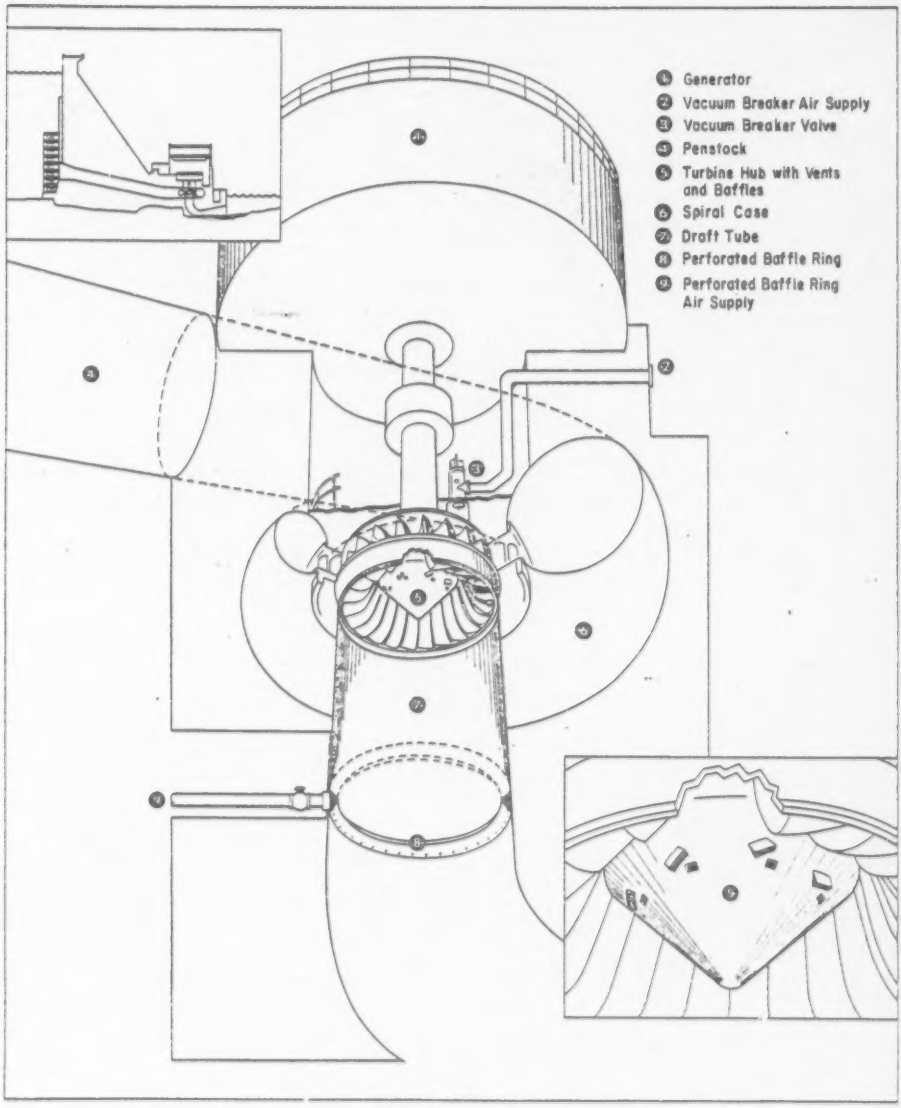
1 Generator
2 Vacuum Breaker Air Supply
3 Vacuum Breaker Valve
4 Penstock
5 Turbine Hub with Vents and Baffles
6 Spiral Case
7 Draft Tube
8 Perforated Baffle Ring
9 Perforated Baffle Ring Air Supply

Figure 2 - Location of Hub and Ring Baffles for Turbine Venting

Table 1

Summary of Coldwater Fishery Benefits Below Norris Dam

Alternatives

	Dam As Is	1 Turbine Venting Only	2 300 CFS Through Sluices	3 600 CFS Through Sluices	4 1,000 CFS Through Sluices	5 600 CFS Through Hydro Addn.	6 300 CFS From D/S Barrier	7 600 CFS From D/S Barrier	8 1,000 CFS From D/S Barrier	9 600 CFS Cold Water At All Times	10 Pulsating Turbine Operation	11 Upstream Oxygen Injection
Fishing Trips Per River Mile Per Year (000)	2.0	3.0	4.0	5.0	6.0	5.0	4.0	5.0	6.0	5.0	5.5	5.5
Incremental Effects Compared to "Dam As Is" in Fishing Trips Per River Mile Per Year (000)	0	1.0	2.0	3.0	4.0	3.0	2.0	3.0	4.0	3.0	3.5	3.5
Total Angler-Days Use on Entire Tailwater (000)	28.0	42.0	56.0	70.0	84.0	70.0	56.0	70.0	84.0	70.0	77.0	77.0
Incremental Effects Compared to "Dam As Is" on Total Angler-Use (000)	0	14.0	28.0	42.0	56.0	42.0	28.0	42.0	56.0	42.0	49.0	49.0
Unit-Day Values (1980 Dollars)	$9.00	$9.80	$10.25	$10.72	$10.72	$10.72	$10.25	$10.72	$10.72	$10.72	$10.72	$10.72
TOTAL ANNUAL BENEFITS[1] (Million $)	$0.252	$0.395	$ 0.523	$ 0.653	$ 0.749	$ 0.653	$ 0.523	$ 0.653	$ 0.749	$ 0.653	$ 0.701	$ 0.701
INCREMENTAL BENEFITS[1] (Million $)	0	$0.143	$ 0.271	$ 0.401	$ 0.497	$ 0.401	$ 0.271	$ 0.401	$ 0.497	$ 0.401	$ 0.449	$ 0.449

1. Calculation of benefits includes an adjustment for the buildup of benefits over a 5-year period.

GAS SUPERSATURATION
COSTS AND BENEFITS

ALTERNATIVES, COSTS AND BENEFITS

The analysis and evaluation described in this section is based solely on the effects of various levels of gas supersaturation on downstream migrating juvenile chinook salmon and steelhead of the Snake River and does not include the effects on migrating adult salmon and steelhead, on other anadromous fish, or on resident fish populations. Furthermore, there was no attempt to relate the projects, and their costs and benefits, to the provisional gas saturation standard of 110% (EPA).

Evaluation is made of two spillway deflector construction projects tentatively scheduled for the period 1975 through 1980. These are:

(1) Project A (1975-78). This project consists of spillway deflector construction at Bonneville, McNary, Ice Harbor, and Little Goose Dams (Table 15). Spillway deflectors at these dams have been determined as the fundamental grouping necessary for overall reduction in gas saturation levels in the Snake and middle Columbia Rivers.

(2) Project B (1977-80). This project consists of spillway deflector construction at John Day Dam as an addition to the deflectors constructed under Project A above (Table 15). This project, therefore, is not an independent alternative but represents an undertaking which is incremental to Project A. Analysis of the costs and benefits from this project will be treated in this incremental fashion.

A third project -- Project C (1976-78)--consisting of spillway deflector construction at Chief Joseph Dam in the upper Columbia River will not be considered for analysis at this time because of the lack of information such as: (1) its contribution to reduction in gas saturation levels in the middle and lower Columbia River and (2) its contribution to survival of upper Columbia River stocks of fish.

Prior to evaluating Projects A and B, an evaluation will be made of the conditions (losses) expected without any of the remedial projects.

Table 15.--Construction schedule and costs of spillway deflector projects, 1975-80.[1/]

Dam / Year	Project A					Project B	Project C
	Bonneville	McNary	Ice Harbor	Little Goose	Total	John Day	Chief Joseph
	($ thousand)						
1975	700	-	-	-	700	-	-
1976	-	600	-	200	800	-	900
1977	-	1,900	600	1,200	3,700	600	1,600
1978	-	2,500	1,400	-	3,900	2,000	1,200
1979	-	-	-	-	-	1,400	-
1980	-	-	-	-	-	800	-
Total	700	5,000	2,000	1,400	9,100	4,800	3,700

1/ Data source: Table 10 of this document. Spillway deflectors have an estimated life of 50 years. Capital construction cost only. Operation and maintenance cost will be nil.

Table 18.--Economic implication of the adult chinook and steelhead losses occurring during 1976-2000.

Species	Total adult loss during 1976-2000 1/	Allocation of loss by fishery 2/		Net value per fish 3/		Total net value by fishery 4/		Total loss in terms of net value
		Commercial	Sport	Commercial	Sport	Commercial	Sport	
	(number)	(percent)		(dollar)		($ thousand)		($ million)
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(F) + (G)
Chinook	963,616	45	55	20.07	14.52-56.68	8,703	7,695-30,040	16.4 - 38.7
Steelhead	1,040,520	26	74	6.53	37.73-112.18	1,767	29,052-86,377	30.8 - 98.2
Total	2,004,136	- - -

APPENDIX D

EXAMPLES OF INFORMATION NEEDED TO IDENTIFY PROBLEM DAMS.

Part A: To Be Completed By Dam Owner/Operator

I. Dam Characteristics

- A. Legal name; location; completion date.
- B. Dam height above ground; spillway elevation.
- C. Elevation and operation of sluice gates; special out-flow structures (multilevel outlets).
- D. Operational procedures: minimum flow, release requirements, duration and frequency for zero flow releases, operation under agreements for flow augmentation or fishery/recreation maintenance, release schedule fixed by appropriative rights, sluicing of sediment required to maintain operation.

II. Impoundment Characteristics

- A. Project purposes--hydro power, cooling water, water supply, flood control, irrigation, etc.
- B. Extent and duration of stratification.
- C. Impoundment surface area, mean depth, maximum depth, and storage volume.
- D. Retention time.
- E. Sediment accumulation.
- F. Extent of algal blooms, aquatic weeds, fishkills, or complaints from public.
- G. Include water quality data in tailwaters, if available.
- H. Lake used for drinking water in past? Why discontinued?

III. Watershed Characteristics

- A. Drainage area, names of major tributaries.
- B. Is natural low flow provided in dam releases?
- C. Physiographic area of dam, distinguishing land use features (drains coal-mined land, etc.).

Part B: To Be Completed By Permitting Authority

I. Water Quality Considerations

- A. Water quality limited--where in watershed.
- B. Point sources in compliance or not.
- C. Nature of major point sources--loading if possible.
- D. Water quality problems known, fishkills (downstream of dam and in reservoir).
- E. Impairment of use downstream--water quality standards violated? When and how often?

97-999 O—82——79

STATEMENT OF MISSOURI DEPARTMENT OF CONSERVATION BEFORE THE SENATE SUBCOMMITTEE ON WATER RESOURCES, SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS. JULY 29, 1982.

I am James R. Whitley, Superintendent of Fisheries Research, Missouri Department of Conservation, 1110 College Avenue, Columbia, MO. 65201. I am here to testify on Senate Bill No. 2652. We oppose any amendment of the Clean Water Act which would exclude discharges from large impoundments from requirements to meet water quality standards. We have experienced all the various water quality problems which may result from discharges from large impoundments. We are not concerned with the 300-400,000 small impoundments in Missouri because most of them have surface discharges which do not result in degradation of water quality.

There are 13 dams in Missouri which create large, relatively deep impoundments over 1,000 acres in area.

Discharge from five of these impoundments have caused severe degradation of water quality and costly damaging effects on downstream fisheries. The major violations of water quality standards have been low temperature and low dissolved oxygen in the discharges from Pomme de Terre Dam and Stockton Dam. Large fish kills occurred below Stockton Dam as a result of the low oxygen levels. The U.S. Army Corps of Engineers remedied these problems at Pomme de Terre Dam by a simple alteration of the intake level to discharge water from near the surface of the reservoir rather than from near the bottom. The problems with temperature and low dissolved oxygen were solved at Stockton Dam by building a weir in the reservoir in front of the dam. Combined with proper operation this resulted in the discharge of oxygenated water with normal temperature.

The largest fish kill ever documented in Missouri was caused by gas bubble disease in 1978 in the upper 60 miles of Lake of the Ozarks, which receives the most recreational use of any large impoundment in our State. Supersaturation of air in water causes gas bubble disease in fish. Optimum conditions for creating supersaturation occurred when large volumes of flood water were discharged into the deep plunge pool below Harry S. Truman Dam, the most recently completed dam in Missouri. There was a second massive fish kill in 1979 in the upper 51 miles of Lake of the Ozarks. High flows through the spillway of Harry S. Truman Dam again caused gas bubble disease in fish. The Corps of Engineers added a deflector at the bottom of the spillway which has reduced supersaturation to levels which will meet water quality standards if the facility is correctly operated. (There are other problems at Harry S. Truman Dam related to pump back and high downstream flows which have not been solved.) The spillway and stilling basin at Harry S. Truman are very similar to Lower Granite Dam, a Corps dam in the Northwest United States which caused supersaturation problems a number of years ago. A requirement to meet Water Quality Standards below Truman Dam could have

resulted in a different design with lower cost to prevent supersaturation.

We anticipate that there may be similar problems with supersaturation below Clarence Cannon Dam when it is completed in about two years if high flows are discharged through the spillway.

Low dissolved oxygen concentrations in the discharge from Bagnell Dam which forms Lake of the Ozarks has adversely affected fish and other aquatic life. A fish kill in 1977 was so large that dead fish were visible for 68 miles downstream in the Osage River. We have been unable to obtain relief from the problem of low dissolved oxygen below Bagnell Dam either by cooperative efforts with Union Electric Co. (the owner) or through litigation in the courts.

The other remaining water quality violation resulting from discharge from a dam is in Lake Taneycomo below Table Rock Dam. Table Rock Dam was completed in 1958. Due to the depth and large volume of Table Rock Lake, we recognized that there would be a continuous cold-water discharge suitable for a trout fishery in Lake Taneycomo. The Missouri Department of Conservation constructed a trout hatchery and in cooperation with the U.S. Fish and Wildlife Service, rainbow trout have been stocked in Lake Taneycomo since 1959. They grow rapidly to large size and the fishery has become extremely popular. The discharge of oxygen-deficient water from Table Rock Lake became acute in 1970 and threatened the trout fishery which is an important component of a tourist-based economy. The Little Rock District of the U.S. Army Corps of Engineers agreed to fund a study with two objectives: 1. To determine the socioeconomic value of the trout fishery in Lake Taneycomo and 2. To determine the effects of varying dissolved oxygen levels upon the trout fishery. Dr. Stephen Weithman on our Fisheries Research Staff conducted this "state of the art" study.

He found that there were 329,000 days of fishing provided annually by the trout fishery in Lake Taneycomo with an annual estimated value to the local economy of $9.9 million. Angler success is adversely affected by low levels of dissolved oxygen and angler effort is related to angler success. An estimated 12,600 days of visitation are lost each fall of a typical year at Lake Taneycomo because of low dissolved oxygen levels in the water discharged from Table Rock Dam. This amounts to $356,000 lost annually to the area because of the low oxygen problem. The Corps of Engineers presently are studying alternatives and costs for raising the dissolved oxygen levels to meet water quality standards. We are confident that the benefits to this very valuable fishery will far outweigh the costs.

We used the same methods described above to estimate the value of the warmwater fishery in Lake of the Ozarks which is affected by discharges from Harry S. Truman Dam. A survey that we conducted in 1977 indicated that there were 1,860,000 fishing trips that year on Lake of the Ozarks. The estimated value per trip in 1980 as determined nationally by the U.S. Fish and Wildlife Service was $11.00. The multiplier used to measure the value to a tourist

supported area is 1.95, therefore the estimated annual economic value of the fishery to the Lake Ozark region is approximately $40,000,000. Again, the one time cost to alter the spillway at Harry S. Truman Dam to prevent effects of supersaturation on this valuable fishery are outweighed by the benefits.

Considering the values of the important fisheries to be protected and based on our experience in Missouri, we conclude that discharges from large impoundments should be required to comply with Water Quality Standards. This would not require regulation of all dams since discharges from most of them do not cause degradation of water quality. Permits should be required for all dams constructed in the future to insure that proper designs are incorporated which will result in discharge of high quality water.

STATEMENTS SUBMITTED FOR THE RECORD REGARDING SECTION 404

Statement for the Record

of

James W. Winchester
Associate Administrator
National Oceanic & Atmospheric Administration
U.S. Department of Commerce

before the

Subcommittee on Environmental Pollution
of the
Committee on Environment and Public Works
U.S. Senate

July 16, 1982

Mr. Chairman, Members of the Committee, I am submitting for the Record this statement on NOAA's role in the programs and activities authorized by section 404 of the Clean Water Act.

NOAA ACTIVITIES

NOAA, through the National Marine Fisheries Service (NMFS), reviews and comments on projects authorized by Federal agencies which could affect the Nation's waters and fish and wildlife resources. Our comments are part of the section 404 program and are based primarily on our responsibilities under the Fish and Wildlife Coordination Act. We only make recommendations on proposed permits or activities and the main thrust of our review and comment is to look at alternative measures which we believe could reduce adverse impacts from water resource development activities.

Estuaries and associated wetlands are important to living marine resources since many commercial and recreational species spend a critical part of their lives there. Such species are referred to as "estuarine dependent." Approximately two-thirds of our important fishery resources are produced in these areas. Each acre of wetland produces approximately $100 worth of commercial fishery harvest per acre, which when capitalized results in a value of $2,000 per acre per year. Estimates have been made by the COE and reported in the 1981 Coastal Almanac that indicate the loss of coastal wetlands to be about 103,800 acres per year. This loss represents a total value of approximately $208 million annually in commercial fishery harvests alone. It is not possible to generalize on how much of this loss is the result of development activities versus natural causes, but information from the COE indicates that prior to 1954, losses were estimated to be about 10,300 acres per year.

NOAA has found the section 404 program to be of great value in slowing the loss of wetlands. It provides a measure of protection for the fish and wildlife that use our Nation's waters, and preserves a diversity of important habitats for fish and wildlife. The program also addresses the impacts of contaminated materials and sedimentation and turbidity through protection of wetlands, which filter, absorb, and retain pollutants in run-off before they reach our rivers, estuaries, and coastal waters. Finally, the

program serves two kinds of economic interests: commercial and recreational fisheries and water-related recreation industries; and second, the protection of economic investments through flood and erosion control.

NOAA has participated in numerous permit reviews with respect to section 404 projects. In the first quarter of 1982, we received over 1,800 public notices of permit applications for review, of which 784 involved section 404, 306 involved section 10 of the River and Harbor Act, and 670 involved a combination of sections 404 and 10. The permit applications proposed over 3,600 acres of habitat alteration. Of the 3,600 acres, nearly 2,100 acres were proposed for filling and over 1,000 acres for dredging. We concluded that altering some 2,000 acres was not objectionable because fisheries habitat would not be adversely affected, or because losses could be mitigated through habitat creation, restoration, or enhancement. We proposed some 470 acres of habitat mitigation. In this quarter, we recommended against issuance of permits affecting approximately 1,600 acres of fisheries habitat. Negotiations are expected to produce agreements where most, if not all, of these permits will be issued by the Corps.

NOAA supports the goal of minimizing delays in the permit process. These problems are being addressed administratively. The Vice-President's Regulatory Reform Task Force reviewed the section 404 regulatory program to reduce delay involved in the issuance of

Corps permits. In the past, there have been instances of substantial delay in the issuance of permits. The Task Force's recent decisions concerning administrative reforms of the 404 program are designed to minimize delay and reduce redtape while allowing for necessary protection of our nation's waters. For example, the Task Force required the Secretary of the Army to renegotiate the memoranda of agreements with other agency heads including the Secretary of Commerce to speed up the permit process. A Memorandum of Agreement (MOA) between the Secretary of Commerce and the Secretary of the Army, signed July 2, 1982, sets a target date for permit issuance of not more than 60 days after public notice. We anticipate that full implementation of the MOA and adoption of the other regulatory reforms will expedite decision-making on permits by the Corps.

INTERIM FINAL REGULATIONS

We view the regulatory changes proposed by the COE as complementary to existing state mechanisms for wetlands management. We believe they will be effective when implemented with state efforts. As part of the President's New Federalism initiative, the interim final COE regulations expand state responsibility to administer section 404 and section 10 general permits with minimal Federal oversight. This recommendation recognizes the abilities and interests of most states in managing wetlands.

NOAA is firmly committed to the expansion of the general permitting process as authorized by Congress in its 1977 amendments to the Clean Water Act and identified by the Presidential Task Force as a significant opportunity for regulatory reform.

Properly developed general permits can facilitate effective non-duplicative administration of the section 404 program. The "general permit" which relies on permits issued by the North Carolina Coastal Management Program, has been a primary example followed by the Corps in recommending expanded use of general permits on a national and regional basis. By relying on state program permits which consider wetlands preservation, the Corps regulations will reduce duplication and delay without jeopardizing wetlands resources. Even before promulgation of the new regulations, under the auspices of NOAA's national coastal zone management program, states have improved coordination and cooperation with the Corps in managing wetlands resources.

Many coastal states have regulatory systems similar to or modeled after the section 404 program objectives designed to control the alteration of coastal wetlands, and through the coastal management program, are encouraged to exercise their rights and responsibilities in this area. These programs, designed to complement and enhance Federal efforts in the management of tidal and Great Lakes' coastal resources have served as a basis for resolving resource conflicts in a timely manner, especially in wetlands areas.

Joint interagency processing of section 404 and section 10 permits has resulted in monthly meetings at several of the Corps' Districts in the northeast which include representatives from EPA, Fish and Wildlife Service (F&WS), NOAA, and state regulatory and advisory agencies to discuss project impacts and alternatives. The Corps reports that these meetings have reduced processing time by 50 percent in non-controversial projects and 20 to 30 percent in others.

As an example of state and Federal cooperation, the Louisiana Coastal Resources Program has been working with the COE New Orleans District since September, 1980 to develop a MOA which would establish a joint public notice procedure between the State and the Corps. Although it appeared that an agreement was near completion early this summer, the COE and the State have shifted their efforts toward negotiating a "general permit" process similar to that used by the COE's Wilmington District and the North Carolina coastal program.

NOAA supports the Corps proposal to expand the scope of the public interest review and encourage expanded use of interagency processing, the establishment of internal processing deadlines, and pre-application consultation. We believe such consultation should occur between applicants and resource agencies, as well as the Corps. State coastal programs have encouraged applicants to meet with all permitting agencies to resolve conflicts before submission of permit applications. We strongly support the Corps efforts to encourage joint Federal/state cooperation.

The interim final regulations solicit the assistance of all interested Federal, state, and local agencies to observe and report activities for inspection of permitted activities. NOAA will be discussing with the Corps how to utilize the activities of monitoring and evaluation of approved coastal management programs (section 312 of the CZMA) as a vehicle for reporting information on nationwide permits and other aspects of wetlands management in the coastal area. Such activities are in many cases routinely monitored by state agencies in the implementation of their permit programs, and the information reported could be shared with the Corps in order not to duplicate these efforts. However, this vehicle only exists in those states with approved coastal management programs.

An additional option under consideration by NOAA which could prove successful in eliminating delays in permit processing is special area management planning. This would provide a forum in which Federal, state, and local agencies establish the policy basis for future permitting decisions within the context of existing environmental standards and development needs. The plan would result in a site-specific management plan with predesignated permissible and non-permissible uses. The benefits of this interagency collaborative approach include: (1) long-term improvements in the consistency of the overall permitting process; (2) avoidance of future resource development conflicts; (3) a balance between conflicting demands of resource users; and (4) avoidance of permit delays and judicial challenges to projects conforming to the interagency plan. While this approach

was endorsed by the Corps in discussions over the last two years, our recommendation for including this mechanism in the interim regulations was not adopted, but the Corps districts have cooperated in the development of particular plans. For example, the Washington Coastal Zone Management Program has gone far in developing a special area management plan for the Grays Harbor Estuary. The plan provides a predictable basis for review of future projects in the estuary area so that Federal applicants are aware of which projects are likely to meet section 404 guidelines, as well as state requirements. A similar effort is underway in the Mississippi CZM program with the Ports of Pascagoula and Bienville. NOAA will continue to work with the COE and other agencies to expand the use of this process.

To avoid delays at the end of the permit process, we are working with state and Federal agencies to pre-designate suitable dredged spoil disposal locations early in the project planning stages. Coupled with special area management planning, pre-designation of spoil disposal sites can serve as effective Federal and state mechanisms for avoiding delays and balancing resource considerations with development needs.

NOAA looks forward to working with the Department of the Army and other Federal and state agencies in implementing the decisions of the President's Task Force on Regulatory Relief on the section 404 program. Specific comments on the proposed COE interim final regulations will be forwarded to the Corps.

American Fisheries Society
ORGANIZED 1870 | INCORPORATED 1910

JOHN J. MAGNUSON
PRESIDENT 1981-1982

CARL R. SULLIVAN
EXECUTIVE DIRECTOR

ROBERT L. KENDALL
EDITOR

August 12, 1982

Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
Senate Environment and Public Works Committee
Room 4200, DSOB
Washington, D.C. 20510

Dear Senator Chafee:

The American Fisheries Society (AFS) would like to submit the attached testimony for the record of your July 29, 1982 public hearing on S.777, a Bill to "Amend the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters, and for other purposes." These comments are additional and supplemental to comments on the Clean Water Act which AFS filed with your Committee on July 28, 1982.

We recognize that your hearing will be focusing directly on S.777. This Bill would restrict the jurisdiction of Section 404 of the Clean Water Act with regard to permit coverage of the nation's aquatic habitat and wetlands. To a lesser extent it may also affect the Section 10 program (Act of March 3, 1899). The attached testimony addresses this proposed legislation, which is of major concern to the American Fisheries Society (AFS) and its members.

We would like to point out in addition, that a major effort is under way to modify and reduce the federal scope of the Section 404 mechanism by administrative means. This includes promulgation of revised regulations and re-negotiation of established, existing Departmental agreements. We realize that these administrative intiatives are not within the primary framework of this hearing. Nevertheless, we are concerned with the relationship of this parallel development with legislative initiatives such as S.777. In view of this relationship, we are attaching a copy of our June 8, 1982 letter to Christopher C. DeMuth, Executive Director, Presidential Task Force on Regulatory Relief for such consideration as you and your staff may wish to give it.

The AFS has studied the statement concerning S.777 which was presented at the hearing by Dr. Jay D. Hair on behalf of the National Wildlife Federation and eleven other conservation organizations. The AFS concurs and endorses that statement also.

A number of proposed bills have been introduced into the House of Representatives (HR 5766, HR 3962, HR 3983, and HR 393) which are similar in purpose to S.777, although

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their scope does not appear to be as drastic. Much of the content and thrust of the attached testimony is applicable to these House Resolutions.

Sincerely,

Carl R. Sullivan
Executive Director

CRS/ymw
attachments

cc: Dr. Jay Hair, National Wildlife Federation
Eileen Barthelmy, American League of Anglers
Jack Berryman, International Association of Fish & Wildlife Agencies
Gustave Fritschie, National Fisheries Institute
William R. Gianelli, Assistant Secretary of the Army for Civil Works
Bill Gordon, Director of the National Marine Fisheries Service
Bob Herbst, Trout Unlimited
Harry Hodgdon, The Wildlife Society
Larry Jahn, Wildlife Management Institute
Bob Jantzen, Director of U.S. Fish & Wildlife Service
Jack Lorenx, Izaak Walton League of America
John Magnuson, President, American Fisheries Society
Gilbert Radonski, Sport Fishing Institute
Allen Wentz, National Wildlife Federation

American Fisheries Society
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Testimony of the American Fisheries Society (AFS) before the Senate Environmental Pollution Committee July 29, 1982 Hearing on S.777

My name is Carl R. Sullivan and I am Executive Director of the American Fisheries Society (AFS).

First let me establish the basis for the AFS to address this subject. AFS was organized in 1870 and is the oldest and largest organization of professional fisheries scientists in the world. Members are fish culturists, limnologists, aquatic ecologists, engineers, and specialists of other disciplines concerned with management of, and research on, living aquatic resources. AFS is an affiliate member of the American Association for the Advancement of Science, and an adherent society of the American Institute of Biological Sciences, is represented in the National Research Council of the U.S. National Academy of Sciences, and is a member of the National Resources Council of America.

The Society promotes the scientific management of aquatic resources for the optimum use and enjoyment by the people of this Continent. This includes sport and commercial fisheries in both fresh and marine waters. It also involves achieving the best possible quality of environment while at the same time meeting other absolutely essential requirements of society.

It is the policy of the Society to encourage cooperation among all water development and regulatory agencies of the State and Federal governments in order to assure the consideration of living aquatic resources in Federally-financed or regulated water development projects amd permit programs. In this connection, AFS has occasionally taken positions on public policy matters involving fish and aquatic life resources and their habitat. In keeping with the scientific orientation of our membership, these positions are taken infrequently and only after careful and conservative analysis of the public question at issue.

AFS believes that legislating sweeping changes in Section 404 jurisdiction of waters and wetlands as now defined in the Clean Water Act is such a major public policy issue. Adoption of this legislation has the potential for extremely serious, adverse impacts on fish and aquatic life resources and the habitat that sustains them.

We do not wish to become involved with the technical details of this proposed legislation. What we are attempting to do is bring some of our basic concerns and views to your attention as you deliberate on this or other proposed legislation with the same objective.

Relationship to Fisheries and Aquatic Life Resources

The waters of the United States as broadly defined by the Clean Water Act comprise the fundamental habitat support system for the nation's fisheries and aquatic life resources. These living resources are of major economic, recreational, food, and aesthetic value to the public. They include the living resources of both freshwater and marine water environments. These include the marine and commercial fisheries since approximately

two thirds of the species concerned inhabit estuarine waters or tributary streams for some portion of their life cycle. For the Gulf of Mexico fishery, the percentage approaches ninety percent. We are just beginning to appreciate the complexity of the linkages between upstream and headwater alteration and impacts on estuarine and marine habitats further down the ecosystem in terms of fisheries reosurces. For example, rainfall and consequent nutrient transport variation from the headwaters of the Appalachicola River in Florida have been correlated with the shellfish productivity of Appalachicola Bay many miles away. There are many other examples of this type of ecosystem linkage.

Much attention has been given to adjacent wetlands as currently covered by the protective procedures of the Section 404 permit system. Certainly the role of wetlands in maintaining fisheries productivity cannot be over-emphasized. Their destruction from economic development, both sound and ill-advised, has likewise been well documented. Almost half of the wetlands in existence at the time of the Nation's founding have been destroyed or degraded, much of it through dredge and fill operations. What is sometimes overlooked is that, in addition to the wetlands aspect, many water-related projects or activities impacting stream fisheries habitat include some form of dredge and fill activity (e.g. construction of an intake or outlet, etc.).

The 404 permit system and its procedures gives the most comprehensive protection currently available to stream and wetlands habitat essential to maintenance of the fisheries and aquatic life resource base.

To our knowledge, no one has ever contended that the current Section 404 permit procedures have not done a generally effective job in protecting the resources and values the Clean Water Act intended to protect. Perhaps the criticism has been that the job has been done too well from the standpoint of certain interests.

S.777 (almost identical wording appears in the comparable House Resolutions) states "The Congress finds that the procedures mandated by, and the regulations issued persuant to, the Federal Water Pollution Control Act and the Act of March 3, 1899, have delayed the construction of needed energy, water resource and other development projects without commensurate benefit to the Nation."

The AFS questions such unsupported assertions and our comments address them below.

Economic Development Considerations

A central thrust of S.777 and companion House Resolutions is that the existing Section 404 permit processing system has unreasonably impeded legitimate and necessary economic development.

One major purpose of the regulatory system in question is perpetuation of the natural resource base (habitat) of the commercial and recreational fishing industries, and their protection from needless destruction by unwise or poorly designed water development projects. Some time is required for design of any project and similarly some time is needed for evaluation of that proposed design and to provide sound data and recommendations during the regulatory process. The real questions are: (1) whether unnecessary delays can be reduced or eliminated by balanced improvement of the existing regulatory system as contrasted to the virtual dismantling proposed by S.777 and (2) what is the true, complete economic cost of the alleged delays and inequities of the current permit processing system. AFS notes that the May 7, 1982 press release from the Executive Director of the Presidential

Task Force on Regulatory Relief cites Corps of Engineers estimates that $1 billion annually could be saved (presumably to applicants planning economic development) through reduction in delays in processing Section 404 permit applications. No data or rationale were presented to substantiate this estimate and thus we cannot assess its validity. We suggest that it is unlikely that that estimate included, or was balanced against, the enormous values of the habitats and their economic productivity which would be damaged or lost by reductions in the Section 404 regulatory activity, if S.777 were to become law.

If the Corps' estimate of cost reduction figure is to be put forward, it seems appropriate to consider it against other costs that might be generated by dismantling the existing protection provided by the Section 404 system. American fishery resources have substantial economic values also.

U.S. commercial fisheries production has a value of $6 billion annually to which can be added the $1.7 billion for the value of fish harvested by foreign vessels operating in US waters. The marine and inland recreational fisheries have been valued at $17.3 billion in the most recent National Survey of Hunting and Fishing, using a fisherman expenditure approach. Approximately 42,000,000 recreational fishermen, 16 years of age and over, utilized the resource. Reduction in the protection which the Section 404 program now affords to the basic habitat on which this whole fishery economy rests, entails costs which AFS believes could well dwarf the alleged benefits from speedier facilitation of conventional economic development. Full analysis of this complex problem is well beyond the scope of these comments. However, AFS believes that phrases in S.777 and companion House Resolutions like "without commensurate benefit to the Nation" simply do not square with the facts. We urge that your Subcommittee carefully examine what appear to be unsubstantiated claims in this area and insist on an objective and accurate presentation of a total analysis, including data available from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service.

In summary, let me say that the American Fisheries Society considers the Section 404 Permit Program to be a matter of utmost importance. We believe that improving efficiency and eliminating unnecessary delay in processing of the Section 404 and Section 10 (Act of 1899) permit applications are desirable and achievable goals. AFS suggested such changes by administrative means in its letter of June 8, 1982 to Mr. Christopher C. DeMuth, Executive Director, Presidential Task Force on Regulatory Relief. Copy of that letter is attached. However, massive jurisdictional shifts in the Federal coverage of these programs as contemplated in S.777 (and companion House Resolutions) are another matter. They will essentially dismantle an existing regulatory mechanism that has proven itself in terms of balanced protection, without provision for a realistic substitute or alternative. Therefore, AFS considers that this proposed legislation is not in the interest of recreational and commercial fisheries resources, their users, or the Nation as a whole.

The AFS therefore recommends that S.777 not be approved by your Subcommittee.

We appreciate this opportunity to present our testimony. Thank you.

Carl Sullivan

97-999 O—82——80

Statement Of The

American Petroleum Institute

before the

Subcommittee on Environmental Pollution

of the

Senate Committee On Environment And Public Works

July 29, 1982

Regarding Section 404

of the Clean Water Act

The American Petroleum Institute (API) wishes to thank the Senate Subcommittee on Environmental Pollution for this opportunity to comment upon Section 404 of the Clean Water Act. API is a national trade association with over 8,000 individual and 320 company members representing all segments of the petroleum industry. Our membership is actively engaged in various types of permitting activities under Section 404 (e.g., canal dredging, the construction of gravel pads for drilling operations, offshore platform construction, etc.). Although the majority of permitted activities are in Alaska and the Gulf region, permits are being sought throughout the United States due to the vast geographical scope of this permitting program.

A special committee within the petroleum industry was established in 1981 to review the Corps of Engineers' Section 404 permitting program and to identify areas of possible improvement. This committee's year-long effort resulted in its identifying numerous problem areas and in recognizing that these problems emanate from both regulatory and statutory sources. For ease of analysis, we will separately outline the need for improving the current regulatory scheme and, more importantly, discuss the urgent need for amending Section 404 of the Clean Water Act.

REGULATORY PROBLEMS

Major problem areas that have been identified by the petroleum industry which can be addressed administratively include:

1. Delays -- The Act provides that final action should be taken within 105 days of the Corps' receipt of a complete permit application. In a recent survey conducted by API, it was found that the average reported permit processing time was 131 days and, significantly, that 25% of all permits applied for took more than 150 days to be approved. Similar delays to the ones we have identified were also commented upon by the GAO in its recently released report entitled "Developing Alaska's Energy Resources: Actions Needed to Stimulate Research and Improve Wetlands Permit Processing", GAO/EMD-82-44, June 17, 1982. Neither our survey results nor the GAO's analysis, however, reflect the sometimes lengthy time spent in pre-application conferences, an appreciable source of project delay.

Permit delays have a significant impact upon the cost of petroleum activities. Contracts must normally be let well in advance of projected starting dates. This is particularly true in the scheduling of drilling rig operations. Although delay is not uncommon, the length of delay for a particular type of project is variable and, therefore, cannot adequately be anticipated or planned for. As a consequence, unpredictable permit delays result in idle contractors which, in turn, add to project costs. In a survey conducted by the Mid-Continent Oil

& Gas Association, it was estimated that delays in the issuance of just 55 permits in the State of Louisiana between September 1978 and April 1979 resulted in additional project costs of over $19.7 million (Attachment 1). This report also estimated that lost or deferred production as a result of these delays exceeded 14.9 billion cubic feet of natural gas and 400,000 barrels of oil. Obviously, these added costs can have severe consequences -- especially for smaller operators.

2. Unreasonable Permit Stipulations -- At the request of various federal agencies, organizations and the states, the U.S. Army Corps of Engineers frequently imposes unnecessary and unsupported permit stipulations. As an example, one member company had to "backfill" canals in the marshlands of South Louisiana where the "soils" are soft and composed of nothing more than organic materials and water. Needless to say, this required backfilling made a negligible difference in water depth because of the soils' consistency.

Permit stipulations have also been identified by the GAO as a major wetland permitting problem. The GAO Report notes that most wetland permits include stipulations of one kind or another and that 40% of these stipulations lacked any site specific support. The GAO

separately commented upon three such stipulations (i.e., winter only drilling, impermeable waste pits and minimum pipeline heights) as being costly to industry and, more importantly, as not having been shown to achieve commensurate environmental protection. Since stipulations necessarily increase costs, unsupported or unjustified stipulations increase costs unnecessarily.

In addition to the imposition of unnecessary and unsupported permit stipulations, the Corps often utilizes the permit process to regulate activities outside its jurisdiction through the imposition of stipulations upon activities that are to be engaged in after the permitted dredging and filling is completed. For example, one member company's permit went so far as to include a stipulation requiring Corps' approval before production could commence from a well that was to be drilled after the permitted activity was completed.

3. Deference by the Corps to Other Federal, State and Local Agencies -- If an agency or an organization objects to a proposal or demands a particular stipulation or condition (even a patently unreasonable one), the Corps frequently fails to resolve the controversy. Instead, it requires the applicant to work the matter

out with the objecting party. Because of the numerous commenting agencies that become involved, inconsistent stipulations are not uncommon. To illustrate this problem, one federal agency sought to require an operator to place its dredged spoil continuously on the side of the canal to be permitted, whereas another agency would have prohibited the continuous deposit of this same dredged material. This obvious conflict resulted in added delay to permit issuance.

This inter-agency deference has had the effect of the Corps abdicating its responsibility as the decision-maker and granting virtual veto power to these other agencies through their ability to stall or delay the issuance of permits. As a consequence, operators are often faced with the choice of either capitulating to these demands in order to expedite the process or incurring increased costs and added delays while contesting unreasonable stipulations.

4. Lack of Balance in the Corps' Regulations -- The Corps' regulations emphasize environmental values, virtually to the exclusion of the energy, mineral and natural resource utilization needs of the nation. This imbalance is also echoed in EPA's Section 404(b)(1) guidelines (which, in our opinion, stress the protection and nonuse of wetlands beyond statutory limits) and in the comments, conditions, and stipulations imposed upon

permit applicants by such agencies as the National Marine Fisheries Service and the Fish and Wildlife Service. Clearly, this imbalance deserves to be corrected.

We have attached to our testimony five case studies which vividly portray many of the impacts which just one operator has experienced under the Corps' Section 404 permitting program (Attachment 2). (These case studies were more fully analyzed and discussed in the testimony of ARCO Alaska, a subsidiary of Atlantic Richfield Company, before the July 8, 1982 Alaska Field Hearing of the Subcommittee on Environmental Pollution, Senate Committee on Environment and Public Works (Attachment 3)).* Specifically, these case studies illustrate permitting problems that result from:

- o Overlapping responsibilities;
- o Threats of delay;
- o Permit conditions of questionable benefit;
- o Overly conservative permit conditions;
- o Lack of appropriate Corps' authority; and
- o Redundancy of review.

As a consequence, excessive permitting delays have resulted which, in turn, have caused project costs to increase unnecessarily. Regulatory and legislative reform, to be effective and meaningful, must be responsive to these very real and tangible problem areas and points of imbalance.

* The attachments referred to have been retained in the committee files.

LEGISLATIVE CHANGE

Current regulatory reform efforts being pursued by the Corps of Engineers will reduce some of the adverse consequences that Section 404 has had on petroleum industry activities. These efforts will not, however, effectively remove all unnecessary burdens and unwarranted requirements. Even in those areas where regulatory reform can be pursued, legislation is needed to avoid the legal challenges that may, in all likelihood, arise. Thus, legislative change must be viewed as an essential ingredient of meaningful reform. Three discrete areas that particularly warrant legislative attention and correction are: (1) the unnecessarily extensive geographical scope of the Corps' Section 404 permitting program; (2) the lack of balance in permit decision-making that exists under the current Act; and (3) the absence of appropriate demarcations of statutory authority.

1. Geographical Scope -- Overly expansive federal programs necessarily result in: unwarranted federal regulation; the dissipation of scarce federal manpower, money and other resources; and the needless imposition of uncertainty and delay upon the regulated community resulting in added costs to industry and increased federal regulatory expenses being ultimately passed on

to consumers and taxpayers. The question to be asked in this context is whether a better scheme can be suggested that would reflect the stated purposes of the Clean Water Act and that would also minimize unnecessary federal involvement and regulation. To answer this question, a bit of background may be helpful.

Section 404(a) requires that a permit be secured from the Corps before any dredged or fill materials are discharged into "navigable waters". Prior to 1975, the Corps interpreted "navigable waters" to mean waters that were navigable under Section 10 of the 1899 Rivers and Harbors Act. In 1975 the District Court for the District of Columbia disagreed with the Corps and interpreted the sketchy legislative history of Section 404's reference to "navigable waters" as meaning that it was intended to extend to the furthest limits of constitutional power. As a consequence, the Corps has regulated not only traditionally non-navigable waters, but also areas that may not be waters at all (e.g., intermittent streams, prairie potholes,normally dry river bottoms and, in some cases, merely damp ground). In Alaska, the Corps' jurisdiction has been asserted over an estimated 57% of the state, including the North Slope and other coastal areas vital to energy development. To bring this extensive regulatory program in line

with the stated purposes of the Clean Water Act and to provide greater certainty as to that which properly should be regulated, a definition of "navigable waters" specifically applicable to Section 404 is needed.

Various legislative regimes could accomplish this result. One such approach is included in S.777 (a virtually identical bill was introduced in the House of Representatives H.R.5766, along with other similar bills that have been introduced in both Houses). Under this bill "navigable waters" would include not only waters that are actually navigable, but also waters that can be made navigable by reasonable improvement and waters that are subject to tidal influence. As an added protection for important or essential waters that might not otherwise be regulated, S.777 would allow the states to either control or add these waters to Corps' control by the simple process of listing and defining them. In this manner, protection for essential waters and important wetlands would be maintained, while at the same time recognizing that the regulation of waters and wetlands impacts upon state rights and responsibilities.

Wherever wetland regulation exists, land use restrictions are imposed. The inherently localized state prerogative to make land use decisions and to engage in land use planning has been sacrificed under the current, overly expansive interpretation of the

proper scope of the Corps' permitting program. What is more, this has occurred despite the stated policy of the Act and the Congress "to recognize, preserve and protect the responsibilities and rights of States . . . to plan the development and use (including restoration, preservation and enhancement) of land and water resources." (emphasis added; Section 101(b)). It is also the policy of the Act that the states regulate dredging and filling activities that occur within their borders. Under the current scheme, the Corps regulates dredge and fill operations, makes land use decisions and significally affects land use planning. This imbalance should be corrected if the announced policies of the Act are to be faithfully adhered to.

An approach such as that outlined in S.777 would: (a) recognize, preserve and protect states' rights, interests and responsibilities; (b) avoid regulatory uncertainty; (c) minimize costly delays by avoiding unnecessary permitting; (d) maintain Corps' regulation over substantial areas of the nation's waters; and (e) allow any state that could not assume the regulatory burden of administering its own program to have its local waters regulated by the Corps of Engineers. We therefore urge favorable consideration of legislation such as S.777 which would accomplish these purposes.

2. Balance -- Permit decisions under Section 404 are to be made by the Corps in accordance with EPA promulgated guidelines. These guidelines, however, must be based upon the same concerns applicable to ocean discharges under Section 403(c) of the Act.

We do not believe that one agency should be empowered to dictate how another agency, which administers a program, should conduct its operations. The Corps, with its extensive dredge and fill experience, is far better qualified to write its own guidelines. This could be achieved by simply amending the Act to require the Secretary of the Army, after consultation with the EPA Administrator, to write the Corps' permit guidelines.

Our second concern is with the Act's reference to Section 403 for the development of Section 404 permit guidelines. Section 403(c), Ocean Discharge Criteria, is aimed directly at Section 402 discharges. It does not provide for specific recognition of other important national interests or values (e.g., resource development, energy self-sufficiency, etc.). A better approach would be to specify these other national interest factors for necessary consideration in permit decision-making. This could be accomplished either by inserting these factors as added Section 403(c) criteria or by deleting reference to 403(c) in Section 404(b)(1) and by including these and other pertinent factors in

an amended Section 404(b). In either case, consideration of the full range of impacts, both beneficial and harmful, would then become a statutorily-required part of the Corps' decision process.

3. Corps' Control -- Under the current legislative scheme, as interpreted by former Attorney General Benjamin Civiletti, the EPA has ultimate authority over all Corps' implementation of Section 404. In addition, the Act specifically empowers EPA to: draft permit guidelines; approve state program assumption (no state has even attempted to comply with EPA's numerous, complex assumption requirements); veto Corps' disposal site authorizations; and bring suit against unpermitted dischargers of dredged or fill materials. The agency charged with implementing the directives of the Act should also determine the limits and direction of its regulatory program. Single interest and/or environmentally oriented agencies should provide input concerning their specific areas of expertise, but one agency must balance all relevant factors in deciding whether or not to issue a permit. Further, the same agency which has permitting authority should also possess all the powers necessary to make that authority effective (e.g., to draft permit guidelines, to bring suit against unpermitted dischargers, etc.). In short, the Corps should be the final authority for determining and implementing its Section 404 permit program.

An added legislative improvement which would expedite Corps' permitting and complement current regulatory reform efforts deserves to be mentioned. Various federal agencies, private groups and even some state agencies have all too frequently caused permit delays and the acceptance of unnecessary permit stipulations. This has been accomplished by their raising vague, nonspecific and/or questionable objections, requesting extensions of time and suggesting the imposition of unsupported or unwarranted permit stipulations. To minimize this problem Congress should consider amending the Act to require the Corps to promptly issue a permit, unless its granting would violate one of the Act's stated criteria.

In conclusion, we urge that necessary legislative changes be enacted so as to avoid these problem areas and points of imbalance. Implementation of the changes we recommend (along with regulatory changes) will give permanence to on-going regulatory reform efforts and will result in a meaningful, responsive program that will both improve the system and protect our national water resources.

WASHINGTON
EXECUTIVE
OFFICES

THE AMERICAN WATERWAYS OPERATORS, INC.

1600 Wilson Boulevard
Arlington, Virginia 22209
(703) 841-9300

Anthony L. Kucera, President

August 12, 1982

Honorable John H. Chafee
Chairman
Subcommittee on Environmental Pollution
Senate Environment and Public Works Committee
Washington, D.C. 20510

Dear Mr. Chairman:

The American Waterways Operators, Inc. (AWO), the national trade association representing the inland and coastal barge and towing industry, respectfully submits our statement on Section 404 of the Clean Water Act for inclusion in the hearing record on revision of the Act.

The barge and towing industry plays a major role in transporting bulk raw materials and manufactured products necessary to the economic and industrial functioning of our nation. The industry moves large quantities of energy products, about 40% of each year's annual grain export, building materials, fertilizers, chemicals and iron and steel products.

The industry operates on the nation's 25,543 miles of navigable waterways. If it is to continue to serve the nation, the industry must rely on a first class water transportation network capable of meeting shipper needs.

In general, we support the attainable goals of the Clean Water Act, but do not believe that Congress, in enacting Section 404, intended to hold up development for years on end due to the delays and conflicting jurisdictional authorities which have been created by 404.

Section 404 seriously impedes and could halt the efficient transport of goods on our inland waterways, as the following examples will clearly demonstrate:

1. A serious shoaling problem on the Upper Mississippi River in Minneapolis required immediate dredging by the Corps of Engineers. The Corps contends they have a permanent easement. The judge ordered

the Corps to stop dredging, but later allowed them to proceed so that navigation would not be halted. Local interests insist that the Corps does not have an easement and the judge has therefore ordered the Corps to conduct a study and make its results known within the next several months. Depending on the results of that investigation, the Corps may have to remove the dredged material already deposited if it is determined they do not have the authority to dredge.

2. The barge and towing industry has encountered increasing difficulty when attempting to obtain Section 404 permits. These difficulties fall into three areas:

   A. Escalation in the amount of paperwork required to file for and complete processing of the permit;

   B. Amount of time necessary to complete the permitting process. In the Upper Mississippi River area, barge lines commonly prepare complex environmental impact statements for the most routine fleeting permits. If there is any controversy surrounding the proposed site, it is not uncommon for processing to take years.

   C. Contributing to the delay and expense of obtaining a permit for fleeting or other activities in "wetlands" areas is the ever-increasing number of agencies and interest groups that have become involved in the permitting process, as per Section 404. It is not unusual to have the U. S. Environmental Protection Agency, the Fish and Wildlife Service and the Department of Interior comment on permit requests as well as state conservation departments, departments of natural resources and departments of transportation. On top of that, local groups such as the Sierra Club, Izaak Walton League, and others are frequent participants in the decision to approve a permit. Staff members of these agencies and members of the environmental groups often work together in a concerted fashion to delay or obstruct necessary development.

The expense encountered by industry due to the extended permitting process has become substantial. The uncertainty of ultimate project success coupled with the cost of EISs and redundant hearings and even litigation has resulted in a strong deterrent to entering into the permitting process. With today's high interest rates, these delays reduce the economical return to the point where it is no longer feasible to proceed with some developments.

The experiences of a subsidiary of an AWO member company which attempted to get a permit for development on the Mississippi River provide a graphic example of the delays and expense caused by Section 404.

Packer River Terminal filed a permit application in 1974 with the St. Paul District of the Corps of Engineers in order to perform dredging to create a barge slip in the development of a river freight terminal. The permit was eventually granted, but then the fill permit for a portion of the purchased property was required.

As the permit process unfolded, a 32-acre parcel of land was deeded to the Fish and Wildlife Service at a cost to this company of over $700,000 to satisfy that agency's requirements in granting the permit. Unfortunately, this did not preclude the Environmental Protection Agency, which had been monitoring the lengthy permit process from the beginning, from exercising its veto power near the end of a very time-consuming and costly process. EPA cited its policy of opposing any additional wetlands conversion to commercial use as the basis for its decision.

The terminal was eventually built, following the favorable decision in federal court four years later, but at a nearly 300 percent increase in project cost. What was to have been a $3.5 million project was eventually finished at a cost of over $10 million.

The Chicago Regional Office conduct in this permit application was so questionable that EPA, of its own accord, engaged the consulting firm of A. T. Kearney, Inc. to conduct an assessment of EPA involvement and conduct in the proceedings.

Another example involves a similar 404 permit application. Farmers Union Grain Terminal Association intended to construct a grain elevator on the Minnesota River between two existing grain terminals. A barge slip was also planned, which required some dredging and filling.

This project was estimated to cost $4 million. The permit, filed in January 1975, was not granted until 1981. The terminal was finally opened in 1982. The delays resulted in an increase in project costs to $20 million, a five-fold increase.

These are just a few examples of how the 404 Program has affected the permit process, and resulted in significant delays which have translated into skyrocketing costs. Multiplied many times over, the 404 Program has become an economic burden. No one really knows how

many projects have been abandoned as a result of the costly, time-consuming and complicated permit process.

The Federal Water Pollution Control Act, later amended as the Clean Water Act, has permitted state and other federal agencies to impose extraordinary dredging requirements on the Corps of Engineers. Over the past ten years, maintenance dredging costs in just the St. Paul District have gone up some 2,000 percent. Ten years ago, 82 percent of dredging funds in the St. Paul District were spent on dredging. Now, only about 40 percent of those funds are spent on dredging, with the majority of the remainder going towards compliance with local regulations.

Although AWO has not yet completed its review of the Corps' July 22 regulatory revisions to its "wetlands protection" program, we support the efforts to streamline the permit process, particularly those provisions which expedite coordination with other federal agencies. We also support the legislative initiatives of members of the House and Senate seeking statutory relief from the burdens caused by present law.

However, these legislative proposals (H.R. 3962 and similar bills) do not adequately address Section 404(t), or 404 (o) as revised in H.R. 3962. The amended Paragraph (o) still provides that "nothing in the section shall preclude or deny the right of any state or interstate agency to control the discharge of dredged or fill material in any portion of the navigable waters within the jurisdiction of such state, including any activity of any federal agency, and each such agency shall comply with the state or interstate requirements, both substantive and procedural to control the discharge of the dredged or fill material to the same extent that any person is subject to such requirement. This section shall not be construed as affecting or impairing the authority of the Secretary to maintain navigation."

Section 404 (t) is vague and has been subject to conflicting interpretations that have allowed the states to overrule the Corps and restrict its dredging activities. In discussing this section, former Chairman of the House Water Resources Subcommittee, the Honorable Ray Roberts of Texas said on the House Floor, December 15, 1977, "... for example, with regard to the day-to-day dredging of the ports of Los Angeles and Long Beach, this provision means that the Corps of Engineers is expected to make all reasonable efforts to comply with state requirements. However, where these requirements cannot reasonably be met, the Corps of Engineers has the authority to, and indeed is expected to proceed with measures necessary to maintain navigation."

The position taken by many states with regard to 404(t) is one of disposal at any cost because the federal government is paying. The Corps, following its perceived dual mandate -- comply with state law, but keep the channel open -- has embarked on extraordinary rehandling measures. Dredged material that used to be handled once and moved a few hundred yards is now handled two or three times and transported for miles. When, on occasion these measures are technically impossible, as in the current Minneapolis case, the Corps is dragged into court.

Hand-in-hand with the confusion created by 404(t) there is the question of what does Congress mean by a 9 foot channel? Since the "navigable channel" has never been defined in law, but only alluded to in legislative history, Congressional intent is here free to rampant interpretation. It is imperative that 404(t), as amended, be clarified to reflect the intent of Congress that navigation is not impaired.

We humbly submit that the intent of Congress in the passage of the National Environmental Policy Act of 1969 and the Clean Water Act has been distorted and abused by state and federal agencies. Their implementing regulations have created volumes of rules, codes, and even zoning. This array of "Catch 22" ordinances is manipulated by the bureaucratic structure so as to never permit a developer to exhaust his administrative remedies, but never grant an approval.

Single issue, single mission bureaucrats in state and federal government have taken NEPA and the Clean Water Act as a Congressional mandate to prevent industrial growth. Along with high interest rates and other economic factors, they may be held accountable for a goodly portion of the present economic crisis.

When citizens complain that the system just doesn't work any more, this is a classic example.

We urge Congress to regain control and restate their intent in this area in clear and unmistakable terms.

Mr. Chairman, we appreciate the opportunity to submit our views.

Sincerely,

Anthony L. Kucera
President

ALK/pkh

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

1957 E Street, N.W. • Washington, D.C. 20006 • (202) 393-2040 • TWX: 710-822-9406 AGC WSH

H. C. HELDENFELS, *President* RICHARD S. PEPPER, *Senior Vice President* JAMES D. PITCOCK, JR., *Vice President*

A. A. BENINTEND, *Treasurer* HUBERT BEATTY, *Executive Vice President*

August 10, 1982

The Honorable John Chafee
Chairman, Subcommittee on Environmental
Pollution
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Senator Chafee:

Enclosed is a statement of The Associated General Contractors of America on recommended changes to section 404 of the Federal Water Pollution Control Act.

We request that this statement be made a part of the record of the committee's proceedings on this issue.

Thank you for your consideration.

Cordially,

Susan J. Loomis

Susan J. Loomis
Associate Director
Congressional Relations

SJL/sm
Enclosure

Statement of

The Associated General Contractors of America

Submitted to the

Subcommittee on Environmental Pollution

Committee on Environment & Public Works

United States Senate

August 10, 1982

On the Topic of

The Federal Water Pollution Control Act

AGC is:

* More than 30,000 firms including 8,400 of America's leading general contracting firms responsible for the employment of 3,500,000-plus employees;

* 113 chapters nationwide:

* More than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utility facilities;

* Approximately 30% of the contract construction by American firms in more than 100 countries abroad.

The Associated General Contractors of America (AGC) represents more than 30,000 firms including 8,400 of America's leading general contracting companies which are responsible for the employment of more than 3,500,000 employees. These member contractors perform more than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utility facilities.

AGC supports S. 777's amendments to the Federal Water Pollution Control Act restricting the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters. These changes are needed because the section 404 permitting process has been expanded far beyond its original intent. AGC also supports the regulatory changes that are being implemented through the Office of the Assistant Secretary of the Army for Civil Works and feels that these changes will greatly improve the permitting process. However, statutory language is needed to specifically define which waters are to be covered by the act, to identify the Corps of Engineers jurisdictional authority and to bring more balance into the permit decision making process.

The Section 404 permitting process is a perfect example of legislation which was proposed and enacted with only the best of intentions. In this case the law was intended to protect wetlands that are vital to maintaining the ecological balance by protecting natural habitat for various forms of wildlife. Unfortunately, as has too often become the case, well intentioned legislation is now used as a tool to bring to a halt the wheels of progress.

Since the 1975 District Court decision in the NRDC v. Callaway case the 404 permitting process has been used as a delaying mechanism on virtually all development which was proposed on or near water. The strategy has been to attempt to require any entity which is interested in moving earth almost anywhere to get a 404 permit. This strategy has worked far too often. Once the permit is required, the process is so cumbersome, time consuming and expensive that many interests abandon plans for development rather than face this crucible.

The best way to stop this ever expanding intrusion of the federal government into the decision process which should be the responsibility of the private interests and local and state governments is to limit the requirement for 404 permits to navigable waterways. The definition which is used in S. 777 is in keeping with the traditional jurisdiction of the Corps of Engineers over navigable waterways. AGC supports this definition and suggests that it be included in revisions to the Act. Such a change would still provide needed protection but would recognize the jurisdiction and responsibility of states to exercise their authority in these matters.

Once the wetlands over which the federal government has authority has been strictly limited, limits must also be placed on which federal agency has lead responsibility in the 404 process. As the process now stands there are too many levels of authority involved and too many areas for conflict. Many of the regulatory proposals will reduce these problems but there is still a need for the legislation to narrow the line of authority. Under

current law the Environmental Protection Agency has the authority to override many Corps decisions on 404 permitting. This is one of the major reasons that the process has become so lengthy and cumbersome. The Corps has demonstrated its ability to bring its expertise in waterway maintenance to the permitting process. Existing requirements for public notice and hearings assure that there will be adequate oversight on Corps decisions. Therefore the role of EPA should be greatly reduced in the 404 process.

The current 404 permit decision making process is not in keeping with the traditional cost-benefit analysis which is the basis for all other federal decisions relative to water resource development. Before the Corps of Engineers or any other federal water development agency can undertake the construction of a water project they must determine that the benefits resulting from the project are in excess of the costs to be incurred. In making such a determination factors, including economic, energy and resource development as well as environmental considerations are all weighed to be sure that the true impact of a project is known. This same type of process is not followed in the 404 process where environmental impacts are almost exclusively given consideration. The Corps of Engineers has been performing cost-benefit analyses for years and is expert in looking at the various factors that should be considered. AGC suggests that as part of the 404 permit process the Corps be allowed to justify its decisions based on the traditional cost benefit analysis.

Over the past few years AGC has been urging the federal government to reevaluate its role in the decision making process. AGC feels that federal involvement has grown to an intolerable degree and should be returned to a more reasonable level. The current proposal to limit federal involvement in wetlands development should be applauded and put into practice as soon as possible.

BRAZOS RIVER AUTHORITY

4400 COBBS DRIVE P. O. BOX 7555 TELEPHONE AREA CODE 817 776-1441
WACO, TEXAS 76710

July 22, 1982

Honorable Lloyd M. Bentsen
United States Senate
240 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Bentsen:

Enclosed for your information is the written statement that will be submitted by the Brazos River Authority to the Senate Subcommittee on Environmental Pollution in connectiown with the hearings to be held on July 29, 1982, on S.777.

We sincerely appreciate the leadership you have provided to efforts to achieve a sound and efficient program for development of the nation's water resources through the sponsorship of this urgently-needed legislation.

Sincerely,

CARSON H. HOGE
General Manager

CHH:gls
Encl.
cc: Each Member
Board of Directors
Brazos River Authority

STATEMENT OF BRAZOS RIVER AUTHORITY
to the
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
July 29, 1982

In support of S. 777, amending Section 404 of the
Federal Water Pollution Control Act

The Brazos River Authority is an agency of the State of Texas created in 1929 and given statutory responsibility for conservation and development of the surface water resources of the Brazos River Basin in Texas, an area of about 42,000 square miles. Although it is a political subdivision of the State of Texas, the Authority does not levy taxes and does not receive appropriations from the State, but is entirely self-supporting, utilizing revenues from its own operations to pay all of its costs.

In carrying out its statutory responsibilities, the Authority has developed a basin-wide water supply system consisting of ten major reservoirs which provide water for municipal, industrial and agricultural use throughout the Brazos Basin and adjoining Gulf Coast areas. The Authority also owns and operates three regional sewerage systems to help protect the quality of surface waters in the Brazos Basin. The Authority has developed and helped to implement the State's water quality management plan for the Brazos Basin. The Authority is currently engaged in a number of studies and management programs in cooperation with other agencies to identify and control non-point sources of water pollution, both man-made and natural, in specific areas of the Brazos Basin.

The Section 404 permit program, as currently applied, results in needless complications and expense to agencies such as the Brazos River Authority in the development of vital water resource projects at a time when the States and their political subdivisions are being urged by the Federal government to undertake greater responsibility for meeting the needs of their citizens. The problems encountered by the Brazos River Authority in the development of its most recent water conservation and water supply project, Sterling C. Robertson Dam and Lake Limestone, are illustrative.

In 1973 the Authority began planning for the construction of Sterling C. Robertson Dam and Lake Limestone on the upper Navasota River, a tributary to the Brazos River, to furnish water supplies needed to develop and utilize extensive lignite reserves in the area for thermal generation of electricity. Since no Federal funding was involved in the financing of the project, and since the Navasota River, with flows of less than five cubic feet per second more than 25% of the time and zero flow for periods of up to 100 consecutive days, is not now nor ever has been navigable, no Federal interests were considered to be involved in the project. In fact, the Authority asked the Corps of Engineers whether any Federal government permits or approvals were required and by letter dated July 19, 1974, the Corps informed the Authority that none was needed.

In accordance with State law, the Authority applied to the Texas Water Rights Commission for a permit to construct the project, and, after a public hearing by the Commission, a State permit was granted on October 1, 1974.

In June 1975 the Authority advertised for construction bids, sold $30 million in revenue bonds to provide the first increment of financing for the project, and on July 21, 1975, awarded a contract for construction of the dam and related facilities.

Subsequent to the initiation of construction, the Corps of Engineers published revised Section 404 regulations, making its permit program for discharge of dredged or fill material into navigable waters applicable to the Navasota River beginning July 1, 1976. On October 9, 1975, the Authority submitted an application for a Section 404 permit for Sterling C. Robertson Dam and Lake Limestone. The Authority also agreed to pay an estimated $35,000 to underwrite Corps expenses in preparing an Environmental Impact Statement utilizing data presented in the Environmental Assessment previously prepared by the Authority and considered by the Texas Water Rights Commission before issuing the State permit for Lake Limestone.

The Corps circulated the Authority's permit application to a myriad of Federal agencies for comment, and no objections to the issuance of the permit were received from any of them until February 2, 1976. At that time the U.S. Fish and Wildlife Service recommended that the permit be denied unless the Authority agreed to purchase 15,800 acres of land (in addition to the 15,000 acres required for the dam and lake) for use as wildlife management areas to be administered by the Texas Parks and Wildlife Department. The Authority strenuously objected to this recommendation on the grounds that taking an additional 15,800 acres of farm and ranch land out of private ownership to create a wildlife management area where none had existed before was contrary to the public interest, that the Authority had no source of funds to pay the enormous costs that such an acquisition would require, and that, other considerations aside, the Brazos River Authority has no legal authority to take land from private ownership for such use.

In December 1976, the U.S. Fish and Wildlife Service reduced its demands from 15,800 acres to 5,000 - 6,000 acres. The Authority's rejection of these new demands as no more supportable than the original demands was supported by the citizenry of the project area, by numerous local governmental units and by the Governor of the State of Texas.

In spite of U.S. Fish and Wildlife Service demands that construction of the project be halted pending resolution of the Section 404 permit problem, the Corps of Engineers allowed the Authority to proceed with construction while the Section 404 permit dispute was elevated from the District Engineer to the Division Engineer to the Chief of Engineers and finally to the Secretary of the Army for resolution.

The Authority's Board of Directors was faced with the possibility that Lake Limestone could not be completed and placed in operation to perform the water supply function for which it was designed because of the continuing dispute with the U.S. Fish and Wildlife. In October 1977, the Board reluctantly agreed to the terms of a Section 404 permit which requires the Authority to commit $500,000 from its working capital for acquisition of land or interests in land for wildlife mitigation purposes, on the basis of advice from and subject to the concurrence of the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department. Finally, in April 1978, more than 900 days after the permit application was submitted, a Section 404 permit for Lake Limestone was issued.

This issue is still unresolved. It has thus far not been possible to obtain lands for wildlife mitigation in accordance with criteria established by U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department. Five hundred thousand dollars of the Authority's working capital is unavailable for use and enormous amounts of public and private time and money have been wasted because of mitigation demands imposed in obtaining a permit under Section 404 of the Federal Water Pollution Control Act. The bureaucratic permit requirements imposed on the project were totally unrelated to water quality and no justification based upon the public interest was ever established.

The recently-issued "Administrative Reforms to the Regulatory Program under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act", when fully implemented, will, it is hoped, drastically reduce the costly and time-consuming bureaucratic burden which only serves to delay the completion of vital water resource projects. These administrative reforms are a step forward, but they will not totally rectify the problems created by the misinterpretation by a Federal District Court of the Congressional intent of the Section 404 permit program. Legislative amendment of Section 404 is still needed to correct this misinterpretation by the court.

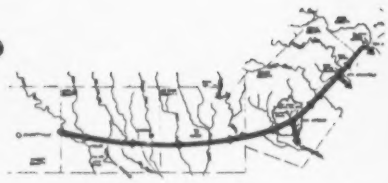
S. 777, introduced by Senator John Tower of Texas on behalf of himself and Senator Lloyd Bentsen of Texas, would limit Federal regulatory jurisdiction over the discharge of dredged or fill material to "navigable waters" as traditionally defined, that is, "all waters which are used, or are susceptible to use in their natural condition or by reasonable improvement, as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark". This is the jurisdictional limitation under which the Corps of Engineers administered the Section 404 permit program prior to 1975 when the Federal District Court for the District of Columbia ordered that the Corps expand the program to include all the waters of the United States.

S.777 contains provisions that will allow States which wish to have non-navigable waters regulated under Section 404 to do so without imposing a similar requirement on other States which prefer that the Corps' jurisdiction be limited to "navigable waters" as traditionally defined.

The Brazos River Authority strongly supports the enactment of S.777 in order to relieve the court-imposed burden of unnecessary and unwarranted Federal bureaucratic intervention which characterizes the present Section 404 permit program, and to enable agencies such as the Authority to proceed with development of vitally-needed water resource development projects in a timely and efficient manner.

EDWARDS UNDERGROUND WATER DISTRICT

1200 TOWER LIFE BUILDING
SAN ANTONIO, TEXAS 78205
(512) 222-2204



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F. M. MAULDIN

5.12-2
1.4-8.2-1

I. Marsh Rice, Exec. Vice President
Trinity Improvement Association
Suite 23, Plaza Bldg.
2117 W. Airport Freeway
Irving, Texas 75062

Dear Mr. Rice:

In response to request by Texas Water Conservation Association for written information regarding Senate testimony on a bill concerning Section 404, there is enclosed a copy of a Resolution of the Board of Directors of the District dated May 12, 1981, supporting the bill.

Sincerely,

Thomas P. Fox

Thomas P. Fox
General Manager

TPF:jc
encl.

CC - Texas Water Conservation Assn.
with attachment

RESOLUTION OF THE BOARD OF DIRECTORS
EDWARDS UNDERGROUND WATER DISTRICT
supporting
SENATE BILL 777, UNITED STATES SENATE

WHEREAS, the Edwards Underground Water District is responsible for conserving, preserving, protecting and recharging the Edwards Aquifer; and,

WHEREAS, under current definitions and interpretations virtually all surface waters are determined to be "navigable" thus "waters of the United States"; and,

WHEREAS, many streams are designated as "navigable" that do not, nor could not, meet the definition as navigable as that term was originally intended; and,

WHEREAS, the Federal Water Pollution Control Act authorizes the United States Army Corps of Engineers to issue permits for activities in navigable waters involving discharge of dredged or fill material; and,

WHEREAS, the "discharge of dredged or fill material" has been interpreted to include construction of dams thus requiring permit under Section "404" of the Clean Water Act; and,

WHEREAS, such permits for activities on streams that are not truly navigable are unnecessarily burdensome and duplicative of State regulations;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Edwards Underground Water District endorse and support the legislation (Senate Bill 777) introduced by Senators John Tower and Lloyd Bentsen that would amend the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable water (Section 404); and that the management is authorized to take necessary and appropriate actions to support this legislation.

Passed and approved by unanimous vote of the Board of Directors of the Edwards Underground Water District on the 12th day of May, 1981.

Charles W. Rothe, Secretary
Board of Directors
Edwards Underground Water
District

Bruce T. Foster, Chairman of the
Board of Directors
Edwards Underground Water
District

STATEMENT FROM GIFFORD-HILL & COMPANY, INC. CONCERNING SECTION 404

The broad use of the term "navigable waters" and the fact that the Army Corp of Engineers' permit approval is subject to EPA veto have rendered the 404 permit process a burdensome, time-consuming and costly process which affects government, industry and ultimately the tax payer. Permit decisions have been known to take as long as three or more years. Provision must be made to assure a permit decision within a reasonable amount of time with limitation of jurisdiction to those areas which would be detrimentally affected by dredge and fill activities.

The authority granted the Army Corp of Engineers by Section 404 of the Federal Water Pollution Control Act to issue permits for discharge of dredge or fill materials into rivers of the U. S. has come to include almost any type of digging, clearing or drainage work in or around "navigable waters". Our concern is the definition of "navigable waters". "Navigable waters" has become a broad, vague term which includes not only navigable rivers and streams, but also occasionally inundated areas which only support vegetation characteristic of wet and boggy soils. The obvious negative impact on mining, development and economic growth of this broad jurisdiction by the COE can be removed by a clear definition of "navigable waters". As proposed, the term would include waters which are used, or are susceptible to use in their natural condition or by reasonable improvement, as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark.

STATEMENT OF: GUNNISON COUNTY WETLANDS COMMITTEE

BY Shirley J. Woodbury

101 N. Main Street

Gunnison, Colorado 81230

FOR THE

SENATE ENVIRONMENTAL and PUBLIC WORKS COMMITTEE

July 29, 1982

Mr. Chairman: I am Shirley J. Woodbury, Chairman of the Gunnison County Wetlands Committee, Gunnison, Colorado. This Committee was formed in January of 1981 with representatives of the Gunnison County Stockgrowers, Gunnison Chamber of Commerce, Gunnison County Board of Realtors and Gunnison Builders and Contractors for the purpose of seeking solutions to the Wetlands classification on all of Gunnison County by the Sacramento District of the U. S. Corps of Army Engineers.

First, I'd like to give you a brief background sketch of our situation in Gunnison. The Gunnison County Commissioners received a letter on December 29, 1980, from G. W. Probasco, Chief of the Construction-Operations Division of the U. S. Army Corps of Engineers, Sacramento District, shown as Exhibit #1, informing them that large portions ('practically all') of the Gunnison Valley had been determined by the Corps to be 'wetlands' within the definitions for 'navigable waters' found under the Clean Water Act's regulations at 40 CFR 230.8. These areas, therefore, are subject to the requirements of the Clean Water Act, and perhaps more importantly, to the regulations stated therein. Those regulations basically provide that the discharge of dredged material exceeding one cubic yard into the 'navigable waters' ('wetlands or tributaries') requires a permit from the Corps. The

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'wetlands' that the Corps is seeking to regulate in Gunnison County are essentially nothing more than some of the most productive hay meadows on the Western Slope and other property locally that must, from a responsible local planning perspective, be developed as Gunnison expands as a community.

We citizens of Gunnison County were stunned! In concern for our private property rights and the economy of our county, realtors, contractors, ranchers, business people and private citizens banded together to form The Gunnison County Wetlands Committee. We engaged in seeking honest, straight forward answers concerning Section 404 of the Clean Water Act and its repercussions on our county.

Our purpose is and has been to monitor the critical, if not economically deadly, implications of the Section 404 on our land use policies within Gunnison County. In an effort to get the facts and alternatives, we have been in constant communication and coordination with Senator William Armstrong of Colorado, Senator John Tower of Texas, Congressman Ray Kogovsek and Congressman Ken Kramer of Colorado.

The permit system provided for by Section 404 of the Clean Water Act is being applied to "so-called wetlands" by the Grand Junction, (Colorado) office of the Sacramento District of the U. S. Army Corps of Engineers. We have in Colorado, a very unique situation. Colorado is controlled under the Clean Water Act by FIVE different District Corps of Engineers offices--Sacramento, California, Albuquerque, New Mexico, Tulsa, Oklahoma, Omaha, Nebraska and Kansas City.

When we were in the early stages of pursuing the 404 permit process we discovered that each regional office has their own interpretation of the law, and of the procedures for implementing the law. We also discovered that a permit through the Sacramento office routinely takes twice as long to obtain as through the other regional offices. It is very difficult to understand a law that is being interpreted and administered so differently in an area the size of Colorado.

In the case of the 404 Wetlands issue:

1. The intent of the law is not being followed.
2. That private rights are being infringed upon,

3. That county land use laws are in jeopardy of becoming useless,

4. And that scientific and workable definitions for wetlands are highly questionable.

We believe that the 'wetland' provisions within the Clean Water Act were intended to provide a filtering agent for river systems; they were not intended to implement complete federal control of development and the economic future of areas such as Gunnison County. We have no objection to implementation of the Clean Water Act or similar legislation to preserve coastal marshes and similar areas; however, we object to the existing wetland provision being applied to Colorado, a historically arid state. We strongly urge that those provisions of the Clean Water Act bringing about this undue hardship be repealed immediately.

Please refer to Exhibit #2, a location map of Gunnison County which shows Gunnison, located on the western slope of the Continental Divide, in the mountains of Colorado. It is a vast area ranging from 7,000 feet to nearly 14,000 feet in elevation, it is largely mountainous, and is drained primarily by the Gunnison River, in which drainage, the City of Gunnison is located. The topography of the area ranges from flat river valleys to sage and grass covered hills, to aspen and evergreen-covered mountains extending to elevations above timberline. Gunnison County is dry and arid with an average annual precipitation of 11.11 inches. Of the land within the county, approximately 83% is owned by the United States of America, through either Forest Service or Bureau of Land Management. The balance of the 17% of privately owned land is situated almost entirely within the flat river bottoms.

The economy of Gunnison County is based primarily on ranching, tourism, and mining. The effects of the wetland designation under Section 404 of the Clean Water Act on all three aspects of our economy are tremendous.

Ranching has been, and will continue to be, a major industry in Gunnison County. The industry is currently beset by a number of adverse effects which make it difficult at best for ranching operations to be financially feasible. The impact of the wetland designation on ranching in our county has added yet another burden on that industry, and one which may well

render ranching, with its dependency on irrigation for hay production, financially and practically infeasible, rather the common sense approach should be implemented so as not to hinder, delay, obstruct or curtail such operations. A major portion of the proposed wetland area is dependent upon the abailability of water from irrigation ditches.

A large part of our economy is based on tourism. We do not wish to pollute or in any way destray our environment. Water is the base of our recreational industry which consists primarily of snow skiing, fishing and boating. The historically clean streams and rivers of our area provide some of the best natural fisheries in the United States. With or without the Clean Water Act we will protect our waterways.

Mining has always been a part of our economic base. In the early days of Gunnison County the miners sought gold, silver, marble, and other hard rock minerals. The quest for coal, gold, uranium, molybdenum, and titanium continues. Much of the mining is done on public lands, and is directly controlled by federal and state agencies.

The human element and their needs are the responsibility of the local government and the private sector. With only 17% of the county available for use, we cannot have any more land taken by 'wetlands' designation, and meet the needs of these people for housing, schools and recreational facilities. We feel that county land use policies adequately fulfill the intent of the Clean Water Act, and promote and preserve our standard of living.

The 'wetlands' in Gunnison County are the result of artificial irrigation. Neither bogs, swamps, deltas, estuaries nor marshes are involved; instead, what has brought the regulatory zeal of the Corps of Engineers down upon the heads of landowners in Gunnison County are: irrigated hay meadows. Although agricultural activities are supposedly exempted from Section 404, treatment of these hay meadows as 'wetlands' has seriously impaired the use of these agricultural lands. The Montrose, Colorado Board of County Commissioners, after much discussion with the Corps has received permission for their ranchers and farmers to clean their irrigation ditches and canals without a 404 Permit so long as they haul off the silt and do not use it on their ditch banks.

I reiterate that agriculture activities are not exempt from regulations of Section 404 of the Clean Water Act. A rancher in our county can, at present dig an irrigation ditch. However, if he takes the fill out of the ditch and lays it on the bank, he then needs a 404 Permit. Also, he cannot remove willows and fill bogs to plant productive crops on his land without a permit. The experience of our ranchers has been that it takes 1¼ - 2 years to get a permit to put in a headgate to divert adjudicated water flow.

We ask YOU to amend the Clean Water Act by differentiating between man-made and natural wetlands and then exempt man-made wetlands from Section 404 jurisdiction. The concerns that the Clean Water Act and the 'dredge and fill' permit program were designed to address are legitimate. The American people and the citizens of Colorado do have a continuing interest in clean rivers, lakes and navigable harbors, unpolluted by noxious materials. Congress intended the program to protect the 'physical, chemical, and biological integrity of the nation's waters.

However, with the 404 Permit Program, the Corps is suddenly attempting to go into the land use planning business, traditionally a local activity. The U. S. Corps of Army Engineers is aborting the fundamental purposes of the 404 Permit Program and stretching the concept of 'navigable waters' to an inconceivable extreme. Did Congress intend that regulation of navigable waters under S-404 to include regulation of land that is 'periodically inundated with water' only because our ancestors and our neighbor's ancestors had the determination and imagination to construct extensive irrigation works on land that otherwise would still today be scrub and sagebrush? I would hope not. Regulating normal activities on PRIVATE lands merely because three months out of the year those lands are in an irrigation water table seems to be stretching the concept of 'navigable waters' to the limits of absurdity.

I would like to refer to Exhibit #3,* a report on "Wetlands and Mountain Meadows" by Dr. E. G. Siemer, Professor and Superintendent, Colorado State University Mountain Meadows Research Center, located on the Western State College Campus, Gunnison, Colorado. Quoting from the report,

*The exhibit referred to has been retained in the committee files.

"The sum of the matter is that wetlands and meadows have many species in common - a result of MANAGEMENT. The sagebrush and dryland species have essentially been irrigated off of the land and they have been replaced by a multitude of wet-habitat species . . . . One might be tempted to look at an aerial photograph and say that all meander areas around streams should be called wetlands. However meadows are a function of TIME . . . . Mountain meadows may be hayed, fertilized; they may have even been renovated and re-seeded . . . . Ranch management . . . . has produced tons of hay and tons of meat for Consumers by mowing and judicious grazing. Ranchers have put small feeder ditches into many of these areas to enhance production."

We feel that this report from Dr. Siemer definitely substantiates that Gunnison County, like all of the state of Colorado is not a wetland area. In recent conversation with Dr. Siemer, he made the explicit point that the presence of sledges and marshes, typical of wetland species, cannot be used as a sole indicator of natural wetlands. These species abound all over man-made 'wetlands'. Dr. C. B. Rumberg, Technical Representative with the Co-operative State Service in Washington D.C. is a previous resident of Gunnison and was manager of Mountain Meadows Research Center for 8 years. He is one of the foremost authorities on irrigated mountain meadows in the inter-mountain western states. He will be happy to answer any technical questions you might have regarding this report, and can be reached at his office, telephone number: 202-382-1877.

Builders, contractors, and residential property owners are also strongly affected by the requirements of Section 404 of the Clean Water Act. Private property rights are being unduly infringed upon by current enforcement practices of the 404 permitting process in an arid locale where it has no legitimate application and was not intended to operate at all. By imposing federal regulations and permit requirements on the most basic activities of private property ownership, present implementation injects into our local land use planning arena inevitable administrative delays, unnecessary expense to taxpayers, and the very real danger of bureaucratic arbitrariness by those unelected officials who will make the ultimate administrative decisions on the permits.

The arbitrary enforcement of Section 404 of the Clean Water Act under the jurisdiction of the U. S. Army Corps of Engineers is reflected in the following instances as they occurred in Gunnison County:

1.) A family has the misfortune of having a tree from their land rot and fall into the river. According to an original inquiry into the matter, the Corps of Engineers determined that since the land bordered the river, that property was automatically a wetlands. The tree, therefore, could not be removed without a 404 Permit. However, following a public meeting in Gunnison with representatives from the Sacramento office an actual on-site inspection was made by Corps officials and the landowners were given permission to remove the tree without a permit.

2.) A man buying approximately 5 acres of hay meadow for building a home was told by the Corps of Engineers in Grand Junction, Colorado that the parcel he wished to buy was a wetlands requiring a 404 Permit. The assessment was made based upon a visual observation done from the county road fronting the property, not by actual on-site inspection. The reason given for a permit requirement was that the parcel required an elevated septic system and the buyer was told that he could be required to replace any wetlands that were disturbed with additional wetlands property. He obviously did not buy this beautiful tract of land.

3.) A local realtor contacted the Corps of Engineers on behalf of a buyer who had submitted a sale contract on a 2 acre tract to determine if they would need a 404 Permit to build a home. Although only this one particular lot was inspected, the entire County-approved sub-division surrounding it was determined to be wetlands, requiring a 404 Permit. This property was not only within a county approved sub-division, it was also outside of the 100 year floodplain. Reasons for this permit requirement was said to be due to the property's adjacency to the Gunnison River, the necessity of an elevated septic system, and the growth of certain plant species. Again, following an actual on-site inspection of all lots within the sub-division, the entire subdivision, including the original lot inquired about, were exempted from the 404 Permit requirement.

4.) At the same time as the previous original determination was made in regard to the subdivision requiring a 404 Permit for each lot, a 28 acre parcel of land with equal soil and hay meadow conditions was exempted from the 404 Permit. The only difference in location between this parcel and the sub-division was the existence of a road bisecting the two.

5.) An elderly retired couple moved to Gunnison to enjoy the mountain splendor and the rippling streams. They built their retirement home near the banks of a river, and for their personal enjoyment, they cleared some willows and created a fish pond, without impeding the flow of the river. They were notified by letter from the Corps that they must "cease and desist." They were told by this same letter and without an inspection of the property to tear out the fish pond and replace the willows within 30 days or be subjected to heavy penalties. According to the U. S. Army Corps of Engineers Permit Program - A Guide for Applicants,

Violators may be subject to:

Civil and/or criminal court action
Fine of $500 to $50,000 per day
Imprisonment for up to 2 years
Removal of structures and materials

Most of the above conditions and incidents were created because of ranching and the effects of the irrigation of hay meadows.

The Gunnison Wetlands Committee spent many hours searching for solutions. We knew that the problems were created by a law already on the books. ALTHOUGH THE LAWS WERE IMPLEMENTED TO KEEP OUR NATION'S WATERS CLEAN, THE ORIGINAL INTENTION OF THE CLEAN WATER ACT, WAS NOT TO CONTROL LAND USE FROM OUR NATION'S CAPITOL.

We needed and got much imput from those affected throughout Colorado and from that imput we arrived at three basic points which we believe will insure everyone their constitutional private property rights. WE ASK YOU TO:

1.) Redefine navigable waters for purposes of the Clean Water Act to include only waters used or susceptible of use in their natural condition as a means of transporting interstate or foreign commerce.

2.) Eliminate the jurisdiction of the Corps of Engineers over man-made wetlands created by irrigation, and

3.) Restrict the expansion of authority over non-navigable waters by the federal government.

Attached to our testimony as Exhibits 4 through 13* are copies of memorials and resolutions passed by the State of Colorado, Colorado Association of Realtors, Gunnison County Board of Commissioners, Mayor of the City of Gunnison, Mayor of the Town of Mt. Crested Butte, Gunnison County Stockgrowers, Gunnison County Board of Realtors, Gunnison County Chamber of Commerce, Jefferson County Board of Realtors and Montrose Board of County Commissioners.

Please note that this critical problem with Section 404 of the Clean Water Act is not limited to Gunnison County but is a major concern to all of your constituents throughout Colorado and much of the nation.

We are supporting Senate Bill 777 introduced IN THE SENATE OF THE UNITED STATES March 24, 1981 by Senator John Tower of Texas seeking the definition of "navigable waters" to mean what it meant in the Rivers and Harbors Act of 1889. By definition of "navigable waters", the Army Corps of Engineers would lose jurisdiction over wetlands, since wetlands are not navigable. This change alone should eliminate most of the problems that have been caused by present Corps policy and regulations. However, we too, share

*These exhibits have been retained in the committee files.

concern that nonnavigable waters--often referred to as 'wetlands'--have some degree of protection. A major provision of this bill allows the Governor of any State, with the concurrence of that State's legislature, to provide the Secretary of the Army with a written request to extend application of this act to those waters, other than navigable waters. We strongly endorse the right of a State to make this determination to seek Federal assistance if it so chooses. Wetlands adjacent to navigable waters can then be evaluated and protected on a local basis.

We testified on behalf of H.R. 393, Tuesday, July 27, 1982 before the Subcommittee on Water Resourses, Committee on Public Works and Transportation. This bill will amend Section 404 of the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over discharge of dredged or fill material to discharges into waters which are navigable.

Under the original River and Harbor Act of 1899, it was not the intent at that time to include smaller rivers or streams which were not navigable. The Gunnison River and Uncompahgre River are no exception. We do not have the same conditions in the West experienced in the navigable rivers which precipitated the original act. The Army Corps of Engineers has gone beyond the original intent of the act and have encompassed areas which should not be their concern. In affect, they are attempting to control land use which is and must be under the control of local governmental entities. Only local people in a given area are familiar with the needs pertinent to land use and THEY should have the entire authority to administer these lands.

We thank you for your time and consideration of this critical matter.

EXHIBIT #1

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

REPLY TO ATTENTION OF: SPKCO-O

22 December 1980

Gunnison County Commissioners
200 E. Virginia Ave
Gunnison, Colorado 81230

Gentlemen:

Inclosed, you will find a copy of a preliminary wetland map recently completed by personnel from our Grand Junction office. The maping is of the immediate Gunnison area.

The area cross-hatched on the map is primarily wetland. There may be small or isolated upland areas within the designated wetlands, but access to them would impact the wetlands. Under Section 404 of the Clean Water Act, a Corps of Engineers permit is required before dredged of fill material can be placed in "waters of the United States or their adjacent wetlands."

A recent inspection of the Gunnison area reveals that a great deal of filling is taking place, mostly in conjunction with new housing construction. Such filling in wetlands requires a Section 404 permit. The Corps of Engineers has the responsibility to enforce the provisions of Section 404 and can direct those who place dredged or fill material in wetland without a permit to cease and desist from such activities.

As you can see on the inclosed map, the scope of the problem is enormous. Virtually all building sites around Gunnison are in a wetland and would require a permit for the placement of fill. Because of the rapidly accelerated growth in and around Gunnison a large number of applications can be expected.

In order to avoid further problems in the area, we feel that is critical that the city, county, and the local Corps regulatory personnel meet at the earliest possible date and begin a process of evaluating the problem and implementing a solution. It is possible that a master development plan could be designed that would minimize the wetlands impacts and still allow Gunnison to grow and progress.

Please reply at your earliest possible convenience to our Grand Junction Regulatory Unit, 2764 Crossroads Blvd., Grand Junction, Colorado 81501, (303) 243-1199.

Sincerely,

G. W. PROJASCO
Chief, Construction-Operations Division

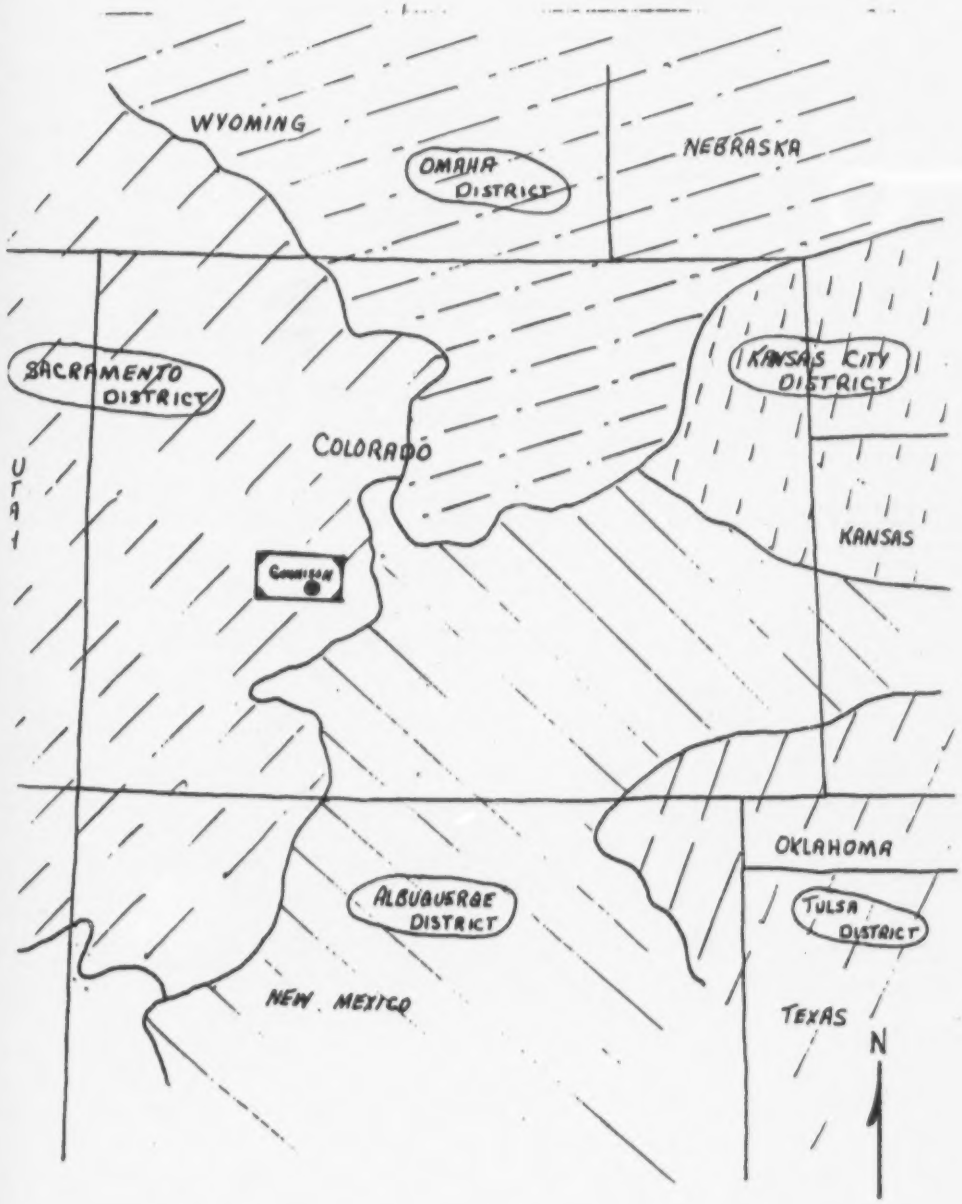
1 Incl
As stated

On Agenda for Feb 3rd 1:45 PM ROLLY

REGIONAL MAP

EXHIBIT "2

SHOWING STATE LINES & CORPS OF ENGINEERS DISTRICTS



Representing Over 2,500,000 Acres of Irrigated Land

Idaho Water Users Association, Inc.

AFFILIATED WITH NATIONAL WATER RESOURCES ASSOCIATION
921 S. ORCHARD SUITE N BOISE, IDAHO 83705
TELEPHONE 344-6690

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TESTIMONY OF SHERL L. CHAPMAN, EXECUTIVE DIRECTOR
IDAHO WATER USERS ASSOCIATION
ON THE MODIFICATION OF PUBLIC LAW 92-500
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
SENATOR JOHN CHAFEE, CHAIRMAN
August 5, 1982

Mr. Chairman:

The Idaho Water Users Association is deeply concerned with regard to the existing regulations set forth under Section 404 of Public Law 92-500 and feel that in order to alleviate problems here in Idaho that the law must be amended. Our Association represents the owners or operators of over 2½ million acres of irrigated land in Idaho as well as over 60 agri-businesses and lending institutions.

The 404 permit program has been used in Idaho in an effort to eliminate water diversions from our streams and rivers. The EPA and the Fish and Wildlife Service have repeatedly objected to dredge and fill activities on the flimsiest of excuses in an effort to prolong application processes and discourage individuals wishing to divert water for irrigation.

A case with which I am personally familiar involved the installation of a short cutoff dike to protect an excavated embayment that had been in place for over 20 years from filling with aquatic vegetation. During the summer months in Idaho's Snake River, aquatic vegetation becomes very heavy and tends to break away from the bottom of the river and float downstream into pumping plants which divert water for food production. The individuals operating this pumping plant wished to install an embankment parallel to the existing bank, about where the original bank had been prior to the excavation 20 years ago to keep the moss in the main channel of the river. The river at this point is in the back waters of C. J. Strike Reservoir and does not support a population of cold water fish but does have a resident fishery of catfish, small mouth bass and carp. None of these fish would have been affected by the embankment and, in fact, the Idaho Department of Water Resources, the Idaho Department of Health and Welfare and the Idaho Department of Fish and Game had all three given approval to a state permit application for a stream channel alteration for the cutoff dike. The EPA and Fish and Wildlife Service objected to the embankment during the 404 permit application for review claiming that it would impact the fishery and reduce public access even though the applicants had agreed to allow public access onto the cutoff dike without restriction.

After negotiation with the Fish and Wildlife Service and the EPA over an 18 month period through two full irrigation seasons during which the applicant experienced severe mossing problems in the pumping plant, the EPA and Fish and Wildlife Service finally

agreed to allow the cutoff dike to be installed. During the negotiations, staff members of the EPA indicated that their primary personal reason for objecting to the cutoff dike was that diversion of water from the facilities might increase because of increased efficiency of the pumping plants and they felt that we had a food surplus anyway. When challenged to put such claims in writing, they refused.

The case described above is not an isolated case in Idaho. The EPA and the Fish and Wildlife Service have repeatedly thrown road block after road block in front of individuals wishing to comply with the regulations and do a good job in stream channel alteration. We have had in Idaho for a number of years an effective and efficient stream channel alteration act that requires anyone altering the bed of a stream below the high water mark to submit an application which is subject to a multi agency review including our Fish and Game Department and Health and Welfare agencies. Time after time the Corps of Engineers, because of objections from the Fish and Wildlife Service and EPA, have either denied or required significant modification in applications for dredge and fill permits even after the State of Idaho has reviewed and approved an identical application.

It is the position of the Idaho Water Users Association that Section 404, Public Law 92-500, should be amended to defer responsibility to the states where a viable state program exists for stream channel alteration control. Additionally, the

definition of "navigable waters" under the Act should be modified so as to include only those waters truely navigable rather than all of the waters of the United States. Additionally, the regulations under Section 404 should be streamlined and the ability of a single agency to veto an application eliminated. When we receive delays as were encountered in the particular situation described earlier, the delay increases cost tremendously, particularly in this period of inflation and rising equipment and materials costs. The delay in the project described earlier created a cost increase of about 75% over that which would have been incurred had the Corps of Engineers approved the application within the same approximate time frame as the State of Idaho. Such delay borders on irresponsibility and should not be tolerated by Congress.

In summary, the existing law is unwieldy and is used as a tool for obstructionists rather than to protect the environment as was originally conceived by Congress. We urge that you modify the law as discussed above and give serious consideration to the recommendation set forth by the National Water Resources Association based in Washington, D. C.

Thank you for the opportunity to provide this testimony.

Respectfully submitted,

Sheri L. Chapman
Executive Director

National Waterways Conference, Inc., 1130 17th Street, N.W., Washington, D.C., 20036

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(202) 638-0090

Dedicated to a greater understanding of the widespread public benefits of the American waterways system

August 16, 1982

Hon. John H. Chafee
Chairman
Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Sen. Chafee:

Enclosed is a brief statement on behalf of the National Waterways Conference, Inc., which we request that you include in the official record of the hearing on Section 404 of the Clean Water Act which your Subcommittee conducted on July 29, 1982.

We compliment you and the Subcommittee for undertaking an inquiry into the problems which have been associated with the permit program under Section 404. We trust that the enclosed material will add to the Senate's body of knowledge on the subject.

Sincerely yours,

Harry N. Cook
President

HNC:tak

STATEMENT OF HARRY N. COOK
PRESIDENT OF THE NATIONAL WATERWAYS CONFERENCE, INC.,
ON PROPOSED REVISIONS TO SECTION 404 OF THE CLEAN WATER ACT

Mr. Chairman and Members of the Environmental Pollution Subcommittee of the Senate Committee on Environment and Public Works:

My name is Harry N. Cook. I am president of the National Waterways Conference, Inc., a 21-year old organization of waterway shippers, carriers, terminal operators, public port authorities, state and local economic development and water resources management agencies, and other businesses, industries and organizations concerned about the maintenance and provision of a modern, efficient and economically viable system of inland waterway transportation in the United States.

We commend this Subcommittee for undertaking a long-overdue examination of problems surrounding the Section 404 permit program under the Clean Water Act. We regret to report that, in its implementation, Section 404 has often resulted in the stifling and straight-jacketing of worthwhile and environmentally sound development to an extent far in excess of Congress' apparent intent when the Act was passed.

Because of separate and duplicative review powers accorded to several agencies in the implementation of Section 404, the time involved in review and issuance of permits is frequently excessive, driving up the costs of private and public projects and, in some cases, discouraging them altogether. The Nation and the affected states and localities have suffered as a result. Jobs have been lost; tax revenues have been forgone. Perfectly sound economic development, involving no damage to wetlands ecology, has been forgone.

In the best of times, this situation should be viewed dimly. In these recessionary times, unnecessary government over-regulation which discourages wise economic development should be viewed as intolerable.

97-999 O—82——83

We applaud recent efforts to streamline the Section 404 permit review process undertaken by the Presidential Task Force on Regulatory Relief, headed by Vice President Bush, and by the Assistant Secretary of the Army for Civil Works, Mr. William R. Gianelli. In recent weeks, Secy. Gianelli's office has finalized Memoranda of Agreement (MOA's) with the Environmental Protection Agency, the Department of Commerce (National Oceanic and Atmospheric Administration), and the Department of Interior (Fish and Wildlife Service).

The new agreements provide for only one level of review when a permit decision made by the Army Corps of Engineers in the field is appealed by one of the other agencies. Previously, as many as four levels of review were conducted within the Federal bureaucracy. This dragged the review time out to 13 months or more, often involving duplicative investigations and review of the same set of facts.

Under the new interagency agreements, a review of a Corps permit decision may only be requested by a senior Washington official of one of the other three agencies, and may be requested only if interagency coordination has been lacking in the initial decision, if new information has been developed, or if there is a need for policy-level review of issues of national importance. In no case should the review exceed 90 days. Uncontested permits are to be processed within 60 days.

These changes clearly represent a bold step in the right direction, and we hope that they will have the desired effect of reducing the onerous burden of costly delay and duplicative review which has greeted private and public sponsors of activities in or near the Nation's wetlands in the past.

However, we feel that one problem inherent in the Section 404 program cannot be resolved by Executive Branch directive or inter-agency agreement. This involves the extremely liberal scope of coverage of the Section 404 program, resulting from the very broad interpretation of the Act by the courts. As a result, Section 404 has come to be applied to activities far removed from lakes, rivers and coastal marshes. We feel that the only solution to this problem lies

in Congressional adoption of a narrower and more specific definition of "wetlands". This would, of course, require amending the Clean Water Act.

In conclusion, we would point out that each year the Army Corps of Engineers processes approximately 10,000 separate permit applications, the overwhelming majority of which are eventually approved — but often only after long and expensive delays associated with agency review. Last year, for example, only 153 permits were ultimately denied, out of 10,718 requested. In short, only one and one-half percent of the projects subject to Section 404 permitting were ultimately judged to be environmentally degrading to the point that the government prohibited their implementation.

Yet, the remaining 98.5 percent — which were determined to be environmentally sound — were subjected to burdensome over-regulation. We strongly support the protection of the Nation's ecologically fragile wetlands resources. But, there must be a better way to go about it than to unnecessarily burden and discourage environmentally sound development which is vital to jobs, economic development and the Nation's economic recovery.

Thank you very much for considering our views on this issue.

# # #

National Waterways Conference, Inc.
1130 17th Street, Northwest
Washington, D.C. 20036

97-999 O—82——84

Statement of

J. W. "Pat" O'Meara
Executive Vice President
National Water Resources Association

before the

Subcommittee on Environmental Pollution
Committee on Environment and Public Works
United States Senate
Washington, D.C.

July 29, 1982

Mr. Chairman and Members of the Subcommittee:

It is my pleasure to submit for the consideration of the Subcommittee the following statement on behalf of the National Water Resources Association. NWRA is a confederation of the State water user associations of the 17 Reclamation States and Hawaii. This year, 1982, we celebrate our Golden Jubilee. Over that 50 year period, NWRA has established a long record of vigorously advocating the development and wise use of water resources, including our support of many worthwhile Federal Reclamation projects.

Mr. Chairman, at a time when the economy of this Nation is on the verge of a depression, it is high time we take a long hard look at the provisions of Sec. 404 of the Clean Water Act; a court decision relating to that legislation; and the rules and regulations that have been promulgated to administer the Clean Water Act.

We wish to make it perfectly clear at the outset that NWRA supports the objectives of the Clean Water Act. We believe in a healthy and wholesome environment. We believe in the conservation and wise use of our natural resources; but we are convinced that somewhere

along the line we have lost our sense of balance as we seek to achieve environmental goals. We believe that some of the rules and regulations, and even some of the goals and objectives which have been established by various involved agencies of the Federal Government under the provisions of the Clean Water Act, go far beyond the letter and the spirit of the law and the intent of Congress.

We would like to remind the committee that it was not the Congress, but, rather, the Federal District Court for the District of Columbia that made a determination, subsequent to the enactment of the Clean Water Act, that changed the traditional definition of "navigable waters" far beyond any definition ever considered by the Congress.

Two actions are desperately needed to bring the Clean Water Act into reasonable balance.

The first such action which we believe is necessary already has been initiated by the Executive Branch. As you well know, a task force headed by the Assistant Secretary of the Army (Civil Works), Mr. William Gianelli, has developed a series of recommendations for administrative reform of the Sec. 404 regulatory programs of the involved Government agencies. If these suggested reforms are adopted and implemented, they will substantially streamline the present permit system which is frought with time consuming and, hence, very costly delays. The resulting escalated costs must be paid by project sponsors even though, in many instances, no public benefit was ever clearly established.

We believe the decision of the Federal District Court to change the definition of the navigable waters of the United States was just

one of many intrusions by the judicial system into an area of law that should clearly be the province of the legislative branch of Government.

This, then, brings us to the second action we believe is necessary, even essential at this time--the enactment of S. 777. S. 777 would return the Federal regulatory jurisdiction over the discharge of dredged or filled material to the area traditionally defined as "navigable waters." This was the jurisdictional limitation of the Corps of Engineers when the Clean Water Act was approved by the Congress, and it is the limit of jurisdiction the Congress should reestablish by promptly enacting S. 777.

To continue Sec. 404 as interpreted by the courts will cost millions of dollars for administration because it needlessly brings vast areas of the United States under the permit system, causing project delays of months, even years, that add substantially to project costs without providing any demonstrated benefits in achieving the goals of the Clean Water Act.

There have been many instances where project opponents have seized on Sec. 404 as a method of stopping worthy projects. In most instances they have failed, but their tactics of delay have vastly increased project costs because of inflationary pressures. We know of one instance, and we expect additional cases, where those who have initiated action to delay a project are now being sued by the project sponsors to recover the cost incurred by escalation while the case was under consideration by the court. One favorable court ruling could bring these irresponsible actions to an immediate halt and bring to a quick end the use of the Clean Water Act as a tool to impede the development of our water resources.

In conclusion, we would hope that the members of this Subcommittee will lend their support to the Administration's effort to effect regulatory reforms as published in the Federal Register of July 22, and also give prompt and favorable consideration to S. 777.

NUECES RIVER AUTHORITY

GE ALLEN WOOD
DENT
CORPUS CHRISTI, TEXAS
LESLIE H. LAFFERE
FIRST VICE PRESIDENT
UVALDE, TEXAS
GEORGE T. JAMBERS, JR.
SECOND VICE PRESIDENT
WHITSETT, TEXAS
JEROME T. BRITE
SECRETARY-TREASURER
PLEASANTON, TEXAS
THOMAS M. REDING
EXECUTIVE COMMITTEE
TAFT, TEXAS

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SAN ANTONIO, TEXAS
WM. A. BEINHORN
SAN ANTONIO, TEXAS
GUS T. CANALES
FREMONT, TEXAS
JAMES L. DONNELL
FOWLERTON, TEXAS
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S CHRISTI, TEXAS
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GENE GARRISON
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JESSE LOCKHART, JR.
BARKSDALE, TEXAS
GEORGE P. MORRILL
BEEVILLE, TEXAS
C.A. MORRIS
CRYSTAL CITY, TEXAS
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THREE RIVERS, TEXAS
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CORPUS CHRISTI, TEXAS
JOE W. TAYLOR
CRYSTAL CITY, TEXAS
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SINTON, TEXAS
JOHN W. WHITE
UVALDE, TEXAS
LON C. HILL
HONORARY LIFETIME MEMBER
CORPUS CHRISTI, TEXAS

CON MIMS
EXECUTIVE DIRECTOR
UVALDE, TEXAS

July 9, 1982

Mr. I. M. Rice, Executive Vice President
Trinity Improvement Association
P. O. Box 5509
Irving, Texas 75062

Re: Amendment of Section 404 of the federal Clean Water Act

Dear Mr. Rice:

Water News, published by the Texas Water Conservation Association, has noted that you have been requested by TWCA president Wayne Wyatt to testify before the Subcommittee on Environmental Pollution of the Senate Committee on Environment and Public Works as the Texas witness favoring amendment of Section 404 of the federal Clean Water Act.

TWCA members have been asked to prepare written accounts of problems they have experienced with the 404 permit process and forward those accounts to you and TWCA for inclusion in the written record of the hearing.

Enclosed is our account of a problem we had with obtaining a 404 permit for the Nueces River (Choke Canyon Reservoir) Project, together with our appreciation of your efforts in pushing for much needed amendments to the Clean Water Act as described in S. 777 and companion bills H.R. 3083 and H.R. 3962.

Sincerely,

Con Mims
Executive Director

CM:mg

cc w/encl: Mr. Leroy Goodson, TWCA
Mr. Ken Carroll, Administrative Assistant to
Senator Lloyd Bentsen

NUECES RIVER AUTHORITY

JUDGE ALLEN WOOD
PRESIDENT
CORPUS CHRISTI, TEXAS
LESLIE H. LAFFERE
FIRST VICE PRESIDENT
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WHITSETT, TEXAS
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SECRETARY-TREASURER
PLEASANTON, TEXAS
THOMAS M. REDING
EXECUTIVE COMMITTEE
TAFT, TEXAS

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SAN ANTONIO, TEXAS
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PREMONT, TEXAS
JAMES L. DONNELL
FORKERTON, TEXAS
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HONORARY LIFETIME MEMBER
CORPUS CHRISTI, TEXAS

CON MIMS
EXECUTIVE DIRECTOR
UVALDE, TEXAS

July 9, 1982

SENATOR JOHN H. CHAFEE, CHAIRMAN, AND MEMBERS OF
THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Re: Amendment of Section 404 of the federal Clean Water Act

Gentlemen:

The Nueces River Authority is a co-sponsor, together with the City of Corpus Christi, Texas, in the Congressionally approved Nueces River Project, also known as Choke Canyon Dam and Reservoir.

This 700,000 acre-foot reservoir is under construction, by the U. S. Bureau of Reclamation, seven miles west of the City of Three Rivers, Texas, on the lower Frio River in Live Oak and McMullen Counties.

Choke Canyon is planned to provide, in conjunction with Lake Corpus Christi, 252,000 acre-feet of municipal and industrial water to the Coastal Bend area of South Texas, including service to the communities of Alice, Ben Bolt, Robstown, Corpus Christi, Odem, Taft, Gregory, Portland, Aransas Pass, Mathis, Port Aransas, Rockport, Kingsville, Bishop, Driscoll, Agua Dulce, Banquette, Beeville, San Diego and possibly Three Rivers, George West and Sinton, as well as to a number of sizeable industries.

About 70% of this $100 million plus project is to be paid for locally by the Nueces River Authority and the City of Corpus Christi.

A "404" permit was required for Choke Canyon because a Federal District Court in 1975 interpreted navigable waters as including all waters, even the most remote headwaters, of streams which

run into bays and estuaries. Prior to this decision, a permit would not have been required for Choke Canyon.

Choke Canyon was authorized by Congress in Public Law 93-493 in October, 1974, with overwhelming support expressed during the Congressional hearing process.

In July, 1976 the Bureau of Reclamation submitted to the U. S. Army Corps of Engineers its application for a Section 404 permit and a copy of the final environmental impact statement. In short order, the Corps determined in August, 1976 that the project's environmental impact had been adequately reviewed by all those concerned and no further environmental review was necessary and issued public notice of the proposed project with a closing date for comments in September, 1976.

Up to this point, numerous public discussions and hearings had been held on the project. Major public hearings before responsible governmental agencies included: Coastal Bend Council of Governments (over 18 hearings and meetings); Texas Water Development Board (200 people meeting in August, 1966); Texas Water Rights Commission (over 200 people meeting for six days in 1966 and two days in 1976 to consider the project's feasibility, sponsorship and water rights permit); Bureau of Reclamation (meeting on the project's environmental impact in August, 1974); Congress of the United States (House Subcommittees on Water and Power Resources of the Committee on Interior and Insular Affairs in November, 1973; and, the Senate Subcommittee on Water and Power Resources of the Committee on Interior and Insular Affairs in July, 1974).

With the Corps' publication of public notice of issuing a "404" permit, problems began. Immediately (September, 1976) the U. S. Fish and Wildlife Service notified the Corps that it was reevaluating the project and asked that the permit application be held in abeyance until its study was completed.

In a letter of response, the Bureau pointed out to the Corps the following:

> "In our letter to you dated July 26, 1976, making application for Section 404 permit, we advised you that both the environmental impact statement (EIS) and the feasibility report had been subject to intensive coordination with the FWS, other Federal agencies, and all applicable state agencies. The feasibility report which was forwarded through the Office of Management and Budget and the President to the Congress was so transmitted in 1974 by the Secretary of the Interior as his report and was subsequently authorized for construction. It contained the report of the FWS (U. S. Fish and Wildlife Service).
>
> The final EIS was also forwarded through the Department of the Interior and filed with the Council on Environmental Quality.

FWS had every opportunity to, and did, provide input and comment on that statement prior to its being filed.

We have understood that issuance or denial of Section 404 permits is based primarily on a project's impact, through construction activities (principally dredging and filling), on the water quality, and the directly affected fish and wildlife resources. We do not agree there should be a new habitat analysis or a new assessment of total project effects on fish and wildlife resources on this recently authorized project. The FWS has previously accomplished such analysis and assessment."

Texas Governor Dolph Briscoe addressed the following strong statement to the Corps:

"I want to make it very clear that in my position, as Governor, and it is the position of the State of Texas that this urgently-needed water supply project should be carried to completion at the earliest possible date and that a Federal permit, in accordance with Section 404 of P.L. 92-500, be issued immediately without further delays.

This important water resource development project has the full approval of the State of Texas. It is urgently needed as an element of the Nueces River Basin system of water supply and water conservation projects for the Coastal Bend Region of Texas. It is needed especially to provide a dependable water supply for the City of Corpus Christi and for many cities and communities in the area presently dependent upon ground water for municipal supply, much of which is of inferior quality.

Based on my analysis of the history of this project, and the procedures which have been followed to this point, there can be no doubt that all provisions set forth in the authorizing document have been met and that the project sponsors have fully complied with all Federal statutes relating to pre- and post-authorization studies and coordination mechanisms. All State-level requirements have been met through the recent issuance of a permit by the Texas Water Rights Commission for construction of the project, impounding of water, and diversion for beneficial uses in the Coastal Bend area. Further, the State of Texas, through the Texas Water Development Fund administered by the Texas Water Development Board, has provided financial assistance to one of the local sponsors of the project in order that it could move forward toward construction. Any additional discussions or studies among and/or between concerned Federal and State agencies concerning such issues as wildlife mitigation, protection of endangered species, or estuarine management as may be desirable can follow issuance of the permit. There is clearly no justification for further delay in processing and issuing the Section 404 permit."

Despite these comments, the Corps placed the permit application in a "hold" status until issues raised by the Fish and Wildlife Service could be resolved.

The "resolving" process took 20 months to accomplish and related to issues involving the Endangered Species Act as opposed to the Federal Water Pollution Control Act.

Using the Section "404" public comment opportunity to stage a last minute reevaluation of the Choke Canyon project, Fish and Wildlife Service then proceeded to dump a truckload of suggested special conditions on the Corps as conditions of its final approval of the project which would allow clearance of a "404" permit. At this point, the project was effectively held hostage and subject to ransom.

The ransom list, which included comments by the National Marine Fisheries Service when it scampered into the fray, included:

- opposition to the Bureau taking of easements in certain non-critical reservoir locations.
- purchase of 8,854 additional acres for wildlife "mitigation" purposes, most of which would be at local expense.
- an annual supply of 515,000 acre-feet of fresh water releases and return flows to the Nueces estuary with two or more diversion channels to be dredged between the Nueces River and the headwaters of the delta marshes.
- delay issuance of "404" permit pending completion of a Fish and Wildlife Service 27 month study of the Nueces Bay system.
- taking of steps necessary to protect various species of possibly endangered animals and plants which possibly could be in the area.
- monthly reports on volumes of fresh water released.

The list went on, and other ideas cropped up, and the Choke Canyon project became more expensive as nearly two years passed by. And none of the commotion had anything at all to do with the water quality or navigability of the river - which is supposed to be the intended purpose of Section 404.

The solution to the problem that Section 404 has caused us, and many others, is in appropriate Congressional action to amend this section to put this dredging permit requirement back into its proper place as exemplified by S. 777 and companion bills H.R. 3083 and H.R. 3962.

The Nueces River Authority fully supports such efforts and appreciates your interest in pushing for a suitable amendment.

Respectfully submitted,

Con Mims

Con Mims
Executive Director

CM:mg

PORT CORPUS CHRISTI

File No. L-13-4(f-1)
July 30, 1982

Senator John H. Chafee, Chairman
Senate Subcommittee on Environmental Pollution
5229 Dirksen Senate Office Building
Washington, D.C. 20510

Subject: Hearing on S.777

Dear Senator Chafee:

Transmitted herewith are 20 copies of the writer's statement regarding S.777 and my views on Section 404 of the Clean Water Act (PL92-500). It is requested that this statement expressing my views be filed for the record in support of S.777.

Until "navigable waters" are clearly defined by Congress, it will not be possible for the Nation's economic recovery to move forward in the Coastal regions. In my view the long accepted definition used prior to the 1970's should, with minor modifications, be adopted by Congress. I do not believe that it was ever the intent of Congress to accept the definition which the Courts adopted as its definition for navigable waters. When the Act was reauthorized in 1977, the Nation had not had sufficient experience with it to adequately evaluate its impact upon the Port industry, which almost without exception is located in waters subject to the ebb and flow of the tide. Automatically the Ports find themselves situated in wetland areas or in submerged lands and are forced to compete for these limited resources.

The reauthorization must also clearly define wetlands. It must be a definition that does not permit a limited few plants to cause a large area to be classified as wetlands. Reason must prevail, which presently is not the case.

Further, the reauthorization legislation must include a provision that recognizes ports and port related uses as an acceptable use in wetland areas. Provision should also be made in the legislation that would dedicate limited land areas adjacent to a port for port related uses. However, it would not be the intent that this legislation preclude the use of mitigation to compensate for the areas used. It would provide that mitigation lands need not be located immediately adjacent to the Port, but could be established at reasonable alternative sites some distance away.

Port of Corpus Christi Authority P.O. Box 1541 / Corpus Christi, Texas 78403 / 512-882-5633 / TWX: 910-876-1446 / Harry G. Plomarity, Port Director
Commissioners: William E. Carl, Chairman / James C. Storm, Vice-Chairman / Eddie Galvan, Secretary / T. D. Saxton / Mack B. Norris / R. E. Salles, Chairman Emeritus

Senator, I believe that reasonable people can sit down and work out these problems when they truly consider the needs and interests of the public. With your knowledge and expertise I would encourage you, Senator Chafee, to take the initiative in resolving these significant issues so that this Nation can move forward and prosper again while at the same time providing reasonable protection for the environment.

Yours very truly,

Duane Orr, Consultant
To The Port and Marine Industry

/df

cc: Senator John Tower
Senator Lloyd Bentsen
Governor Bill Clements

STATEMENT OF
Duane Orr, Marine and Port Consultant
P. O. Box 166, Corpus Christi, Texas 78403
FOR FILING WITH TESTIMONY RELATING TO S.777
BEFORE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
UNITED STATES SENATE

Date of Hearing - July 29, 1982

My name is Duane Orr and I am a Marine and Port Consultant in Corpus Christi, Texas. I am also Consultant to the Port Commissioners, **PORT OF CORPUS CHRISTI AUTHORITY (PCCA), of Nueces County, Texas.**

The purpose of this statement is to express my personal views on the operation of Public Law 92-500 based on my experience working with Section 404 of the Clean Water Act.

BACKGROUND OF THE WITNESS

I have been an active practicing engineer for over 50 years and licensed to practice in Texas and California.

I was associated with the Port of Corpus Christi for over 37 years. Since retirement, I have been Consultant to the Port Commissioners. Before employment with the Port of Corpus Christi, I was with the Corps of Engineers in New Mexico.

Since joining the port, I have worked regularly with the Corps and other Federal agencies during every administration. However, since the passage of the Clean Water Act, the NEPA Act and the Fish and Wildlife Coordination Act it has become impossible to develop a navigation project in a reasonable period of time. Many projects in South Texas are abandoned because of unresolvable problems associated with Section 404 and dredge and fill permits.

LOSSES EXPERIENCED BY CITIZENS OF SOUTH TEXAS BECAUSE OF SECTION 404 OF THE CLEAN WATER ACT

The Port of Corpus Christi Authority and the citizens of South Texas have suffered through long years of delay which has resulted in untold billions of dollars of transportation savings being lost to the public as well as job opportunities because of the manner in which the Clean Water Act (PL92-500) and more particularly Section 404 of it has been interpreted and administered. Almost without exception every Port project in South Texas has been delayed from many months to as much as ten years because of unreasonable requirements placed upon the applicant.

SUGGESTED AMENDMENTS TO THE EXISTING CLEAN WATER LEGISLATION

This legislation can only achieve the necessary objectives if it is amended to provide that all environmental agencies must recognize that most ports and channels are situated in wetlands - not by choice but by necessity. Because of this fact ports must be given the legislative authority to maintain port facilities, to operate and to expand in submerged lands. Unfortunately, in most instances the only available sites for port expansion lies in adjacent wetlands and/or submerged lands.

To accomplish these objectives, the reauthorization legislation must clearly define navigable waters, wetlands and submerged lands. Further, this legislation should establish a zone adjacent to existing ports which would by law be dedicated exclusively for port and port related uses. In this zone the rights of the port to use limited areas of adjacent lands would be paramount to all other uses.

These recommended revisions are not to suggest that mitigation would not be required to compensate for the lands dedicated to port uses. However, the legislation should provide that the mitigation lands need not be located immediately adjacent to the port, but can be sited in appropriate locations some distance from the Port area.

DEFICIENCIES IN THE EXISTING CLEAN WATER ACT LEGISLATION

In the writer's view -

(1) The overall "public interest" is not being adequately considered in the decision making process. In my view the "public interest" must always be paramount to and not subservient to 404 permit decisions.

(2) The legislation should mandate that 404 decisions be finalized within a specific time with only one short extension of time being permitted. Failure to meet the specified dates would result in automatic approval of the permit. Permits should not be denied except for good and valid reasons.

(3) The use of a "general permit" should be a mandatory requirement for all maintenance dredging activities that use previously designated and authorized disposal areas. Furthermore, for such operations the Act should specify that an environmental statement is not required. Wherever possible, other actions should be handled by general permits.

(4) The Wildlife Coordination Act should also be amended to require that comments made under this legislation must be based upon criteria and standards which are consistent with Section 404 (b) guidelines.

EXAMPLE OF PERMITTING DELAYS EXPERIENCED BY ENERGY RELATED INDUSTRIES IN SOUTH TEXAS BECAUSE OF SECTION 404

I would like to site a typical example of the delay that the Port of Corpus Christi Authority and former lessee experienced and now the Port Authority and new prospective tenants are experiencing in obtaining a permit to construct onshore energy related facilities to serve the offshore oil industry.

Over four (4) years ago a prospective tenant, and major supplier to the offshore energy industry, obtained a lease from the Port of Corpus Christi Authority on 500 feet of channel frontage in the Lydia Ann Water Oriented Energy Related Transshipment Park to construct an offshore service facility. The application involved only 7,870 cubic yards of dredging. This company, assisted by the Port, spent over three years trying to obtain a Corps permit, but two Federal agencies other than the Corps could never be satisfied. The Port Authority finally cancelled the Company's lease when it became apparent that the permit would not be forthcoming in time for the company to fulfill its commitments.

About a year ago a group came to the Port Authority with plans for providing operating bases for a maximum of 10 oil companies and/or service industries involved in the offshore development of the Nation's energy resources. Since then this group has been negotiating with the U. S. Fish and Wildlife and National Marine Fisheries Agencies to develop an acceptable plan which would open the way to receive a Corps permit. The Corps of Engineers has not been involved in these latest efforts because their requirements for a permit were established during the earlier application.

The proposed plan for the ten (10) companies involves the development of 34.47 acres. Submerged grasses are growing on 0.35 acre (1/3 acre) out of the 35 acres. Another 2.52 acres of unvegetated bay bottom lying along the tributary access channel between Mean High Tide and Mean Low Tide and between Mean Low Tide and the minus 3.0 contour would be affected.

Dredging of the required berths will have some impact on a total of 2.87 acres (2.52 acres and 0.35 acre) of submerged lands. As mitigation 5.94 acres of vegetated lands has been offered, but no reasonable plan that would not adversely affect the Company's use of these extremely limited size sites has been found that are acceptable to these agencies. Here is just another example of the Nation's energy needs being subservient to 1/3 acre of submerged grass and a small acreage of unvegetated bay bottoms. I ask you, gentlemen, where are this Nation's priorities, today.

COMMENTS ON PRESIDENT'S TASK FORCE ON REGULATORY RELIEF PROCEDURES

From news releases that I have read, I fully concur with most of the regulatory relief measures proposed by Vice President Bush's Task Force. However, I am not aware that the results of the Task Force's directives to the agencies that they modify their guidelines and requirements under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 has been released. I would have reservations until I have studied the new guidelines.

I believe that the most effective objective that can result from the action of this Task Force would be to reduce the conflicts between the agencies by eliminating overlapping policies. But some independent agency must be empowered with the authority to review the guidelines to assure that these conflicts and overlapping policies have been reduced to the absolute minimum.

I note that the Army has been directed to revise its regulations to reduce the time that is now required to prepare its "Environmental Impact Statement and other documents". Reduction in the time required for the preparation of EIS should apply equally to others who prepare EIS's. Likewise, the Corps' revised regulations should provide that they apply to others who must furnish data to the Corps.

I agree that the Corps should establish "more practical administrative procedures for reducing paper time" on permit applications in their offices, but the Corps should not be required to accept incomplete applications and unlegible drawings. Adequate drawings should be mandatory before the Corps is obligated to accept a permit application.

The Corps' revised regulations should make it clear when the time constraints on Corps permit applications begin. Is it the date that the Corps receives the permit application or is it the date that the Corps issues the public notice? The difference in these dates sometimes can be significant and needs to be clarified.

I fully concur that only the regional director or regional administrator should have the authority to request in writing an extension of time on any permit application. This constraint should be helpful if the Corps follows this directive without exception. Perhaps if the agencies were permitted to request extensions of time on only a limited number of applications would make them more discrete in their requests.

CONCLUSIONS

Mr. Chairman, it is my view that the existing legislation which must be reauthorized must undergo significant revisions to protect the public and the public interest. Senate Bill 777 meets most of those objectives. I do not believe that changing the guidelines by directives from the Task Force or by executive order of the President will accomplish the needed changes. It is my view that legislative action by Congress is mandatory to fully accomplish the necessary modifications and revisions needed to the Clean Water Act.

Respectfully submitted:

Duane Orr, Consultant
To the Marine and Port Industry

A GOVERNMENTAL AGENCY
OF THE
State of Texas

SABINE RIVER AUTHORITY
of Texas

P. O. BOX 579
ORANGE, TEXAS
77630

May 20, 1982

Mr. Christopher C. Demuth, Executive Director
Presidential Task Force on Regulatory Relief
Office of Management and Budget
Washington, D. C. 20503

Mr. William Gianelli
Assistant Secretary of the Army (Civil Works)
U.S. Department of Defense
The Pentagon
Washington, D. C. 20310

Gentlemen:

It has been brought to my attention that the Corps of Engineers and Office of Management and Budget are under the impression that state agencies, and the public in general, are for the most part satisfied with the Regulatory Program under Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act. This assumption could not be farther from fact, and can only be attributed to either an uninformed public or a complacent attitude toward involvement by those foremost affected by these regulations.

The Sabine River Authority of Texas, an agency of the State of Texas, is a member of the Water Resources Congress, Texas Water Conservation Association, National Water Resources Association, Interstate Conference on Water Problems and various other state and national water-related organizations, and as such is not unfamiliar with the Clean Water Act and the Rivers and Harbors Act, nor the unwarranted burden of Federal bureaucratic intervention into the affairs of states, cities, local and regional agencies, and the private individual.

I understand that an intensive review of the aforementioned permit regulations has been submitted to the Presidential Task Force on Regulatory Reform by a study group headed by Assistant Secretary of the Army of Civil Works William Gianelli which recommends revision of the existing regulations thus streamlining the Section 404 permit program. This revision also calls for a clarification of "navigable waters" which as it exists at present restricts development, and clearly goes beyond the traditional definition covered by earlier

SABINE RIVER AUTHORITY of Texas

Corps regulatory programs. For all intent and purposes, the Sabine River Authority of Texas wholly endorses the revision and recommendations of the Gianelli study group, and will support legislation limiting Federal jurisdiction under Section 404.

Copies of this correspondence will be directed to Senators John Tower and Lloyd Bentsen, our Texas Congressmen, and water-related organizations which could influence and substantiate our interests.

I would hope that the stance of the Authority will not go unheeded, and likewise the affirmation of our position by other interested agencies in the final and positive outcome of these recommendations.

Sincerely yours,

SABINE RIVER AUTHORITY OF TEXAS

Sam F. Collins
Executive Vice President
and General Manager

bs

cc: The Honorable John Tower
The Honorable Lloyd Bentsen
The Honorable Sam B. Hall, Jr.
The Honorable Ralph M. Hall
The Honorable Charles Wilson
National Water Resources Association Executive Vice President, J. W. O'Meara
Water Resources Congress President, B. Joseph Tofani
Interstate Conference on Water Problems Executive Director and General Counsel, Joan Kovalic
Texas Water Conservation Association General Manager, Leroy Goodson ← THIS COPY FOR

RECORD
STATEMENT

OF

WILLIAM LAMBERT
PRESIDENT
SOUTHERN SEAFOOD COMPANY

TO

THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ENVIRONMENTAL POLLUTION SUBCOMMITTEE
UNITED STATES SENATE

CONCERNING

SECTION 404 OF THE CLEAN WATER ACT

HEARING HELD ON

JULY 29, 1982

STATEMENT FOR THE RECORD

TO THE UNITED STATES SENATE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ENVIRONMENTAL POLLUTION SUBCOMMITTEE

STATEMENT OF WILLIAM LAMBERT
PRESIDENT, SOUTHERN SEAFOOD COMPANY
OF CAPE CANAVERAL, FLORIDA

Mr. Chairman and members of the subcommittee, I am Bill Lambert, owner of the Southern Seafood Company of Cape Canaveral, Florida.

It is indeed a pleasure to have this opportunity to submit my views on Section 404 of the Clean Water Act to the subcommittee. In particular, I would like to stress the direct injury presently being effected on small businesses generally, by the Corps' improper expansion of the legislative mandate initially granted by the 92nd Congress when it enacted Section 404 of the CWA. In short, I am here to voice my concern in this blatant case of government overregulation; one that is clearly contrary to the sound national policy of "less government" and the promotion of sustained economic growth.

I started the Southern Seafood Company of Cape Canaveral, Florida, in 1973. At that time, total revenues by Florida scallop processors were less than $10,000 per year. As a small businessman, I did much to mechanize the industry's operations, to locate new scallop beds, and to increase sales.

By 1981, after the development and introduction of innovative machinery which improved the process of separating the meat of the scallop from the surrounding shell, Southern Seafood's sales reached over 20 million dollars. Industry revenues, in Florida alone, soared to approximately 40 million dollars.

As part of the scallop processing operation, once the scallop meat is removed from its shell, the processor must dispose of the remaining hard shell. At Southern Seafood, we generate some four million pounds of these shells each week. Since 1977, I have deposited and sanitarily buried scallop shells on a 37 acre tract of dry

land that I own just a few miles from my processing plant.

From 1977 to 1980, I conducted these fill and deposit operations without complaint from any governmental authorities. The Florida Department of Environmental Regulation regularly inspected my property without incident. However, in 1980, the U.S. Army Corps of Engineers began to conduct the inspections. The Corps, without adequate explanation, suddenly informed me that my land was part and parcel of the "waters of the United States" and therefore within the Corps' power to regulate. More particularly, the Corps notified me that because vegetation such as Sea Daisy, Leather Fern and Sea Pursiane were present on several portions of my property, those areas were "wetlands".

Under the Corps' interpretation of Section 404 of the CWA, wetlands are part of the "waters of the United States." Under Section 404, no discharge of dredge or fill material may be made into such "waters" without first obtaining a permit from the Corps of Engineers. The Corps ordered me to cease depositing shells on my property, to remove the previously deposited fill, and to replant the area with so-called "wetland vegetation."

From the outset, I have been certain that, even under the Corps' overly broad regulatory definition, classification of my property as a "wetland" is absurd.

The Corps characterizes property as a "wetland" if the land supports certain types of vegetation and is regularly inundated by surface or ground water. Yet, the property I own is covered by surface water only during near-hurricane weather conditions. It is hard enough to support heavy duty cranes and earth moving equipment, and the several species of vegetation prevalent on the property, such as Sea Daisy and Leather Fern, are indistinguishable from those found throughout the entire State of Florida, and many other areas of the United States.

Nonetheless, the Corps seeks to impose land use restrictions which threaten literally to put my company out of business.

It is important to keep in mind that Section 404 was originally drafted by Congress in 1972 not to protect wetlands, but to ensure

that the dredging industry could continue to dispose of dredged materials on marshes. In fact, the statutory language of Section 404 does not even mention wetlands.

Ironically, the same environmental groups which now promote the 404 program as a national land use program for protecting wetlands, initially fought its very enactment.

While the Congressional language implementing the Section 404 program limits the Corps' authority to the "navigable waters of the United States", the Corps has interpreted the phrase in such a convoluted manner that almost any piece of property in Florida can be considered "navigable waters." The Corps' list of plants which it utilizes to identify supposed "wetlands", includes varieties which grow easily in deserts and the Rocky Mountains. Further, under the Corps' policies, areas that are inundated only once in several years can be considered as "regularly" inundated or saturated.

The origin and purpose of Section 404 of the Clean Water Act seem far removed from the Corps' present wetlands program. An analysis of the Section 404 problem will best reveal to you the dilemma Southern Seafood and I confront. The problem is not unique to myself; no, it serves to hamper the innovative and productive initiatives of small businessmen throughout the entire country.

Thus, I wish now to discuss the statutory history of Section 404 and the origin of the Corps' wetlands program.

As you know, in 1972, Congress overrode President Nixon's veto and approved the Federal Water Pollution Control Amendments (FWPCA). The FWPCA replaced pollution laws dating back to 1899 and broadly mandated the protection of the integrity of the "waters of the United States." The 1972 Act, however, did not undertake to set forth a specific national policy for wetlands protection or regulation. Wetlands, which lie at the crucial margin where the land and water come together, can significantly affect the purity of the nation's water and its aquatic life. Congress, however, avoided any reference to the term "wetlands" in the legislation.

Included in the bill was an obscure amendment set forth in Section 404. The amendment was the result of lobbying by representatives of the dredging industry who wanted to exempt dredging activities from the vast regulatory authority over water given to the Environmental Protection Agency in Section 301 of the Act.

This key provision of the FWPCA, Section 301, outlawed the discharge of any "pollutant" into the waters of the United States unless a permit was obtained from the EPA. However, under the Rivers and Harbors Act of 1899, dredging activities in navigable waters already required a permit from the Army Corps of Engineers. Wary that requiring permits from both the Corps and EPA would result in a time-consuming process which would stall dredging projects, Congress, at the behest of the dredging industry, created Section 404. Under Section 404, the authority for issuing permits to discharge dredge soil into navigable waters was to be retained by the Corps of Engineers.

Participants in the enactment of Section 404, including former Senator Edmund Muskie, agree that the amendment was not meant to deal with wetlands. It seems to me that this view corresponds with the language and legislative history of the amendment. There is simply no reference to "wetlands" in the statutory language of Section 404. Likewise, there is no discussion in the official record of the term "fill materials", later to be construed to include materials from activities far outside the traditional scope of dredging rivers and harbors.

Nevertheless, the scope of Section 404 and the Corps' authority have been extended far beyond the intent of the 92nd Congress. Congress never contemplated giving the Corps jurisdiction over "wetlands" and yet Section 404 in effect has evolved into a federal wetlands protection statute.

The major reason for this expansion was judicial and administrative misconstruction of the phrases "navigable waters" and "waters of the United States" in the Section 404 amendment. The traditional interpretations of these phrases limited the

Corps' authority to waters used for commercial navigation. This was consistent with the long-standing doctrine that a relationship between navigability and commerce is required for legislation under the Commerce Clause of the U.S. Constitution.

The EPA and environmental groups later prodded the district courts into holding that Congressional use of the term "navigable waters" in the FWPCA has far broader meaning than it does in earlier legislative acts such as the Rivers and Harbors Act of 1899, which were passed to aid commerce.

Likewise, environmental groups were dissatisfied with what they viewed to be the limited scope of the Corps' initial regulations regarding Section 404. These were in keeping with the traditional view and with the authority Congress had actually mandated. The environmentalists, unable to obtain a national wetlands program from Congress, chose to seek one from the courts.

Thus in 1974 the National Resources Defense Council, (NRDC) and the National Wildlife Federation (NWF) filed suit against the Corps. Although these groups had originally fought the enactment of Section 404 and had favored excluding the Corps from any role in controlling water pollution, they now argued that the Corps had been granted vast authority which went far beyond the "traditional boundaries of navigation" to include "the whole aquatic ecosystem."

In 1975, in the case of NRDC v. Callaway, 392 F. Supp. 385 (D.D.C. 1975) the U.S. District Court for the District of Columbia ruled in favor of the environmental groups and ordered the Corps to issue new regulations "clearly recognizing the full regulatory mandate of the water act."

In order to comply with the decision, the Corps discarded its old limits of Section 404 protection, which were based on the mean high water line. It adopted a new test which included land areas that are subject to periodic inundation of water or supported types of vegetation which are dependent upon saturated soil conditions. All wetlands "adjacent" to navigable waters were swept within the scope of the Section 404 programs. Further, the term "adjacent wetlands" was defined to

include those wetlands separated from waters of the United States by man-made dikes or barriers, and the like. The Corps so profoundly changed the language of Section 404 that even land cut off from water by walls or highways could be considered "navigable waters."

Responsible industry leaders immediately attacked these new regulations as time-consuming and expensive requirements on business operations, and as directly at odds with Congress' intent in enacting Section 404.

Unfortunately, the political atmosphere then prevailing prevented the Congress from effectively reversing the overbreadth of this ill-conceived regulatory framework.

In 1976, the House of Representatives overwhelmingly passed an amendment sponsored by Rep. James Wright (D. Tex.) which would have restricted the Section 404 program to the Corps' traditional jurisdiction--that is, commercially navigable waters. But, an identical bill failed in the Senate by a one vote margin, and the matter died in a conference committee.

In 1977, the Clean Water Act amendments were enacted. The Wright amendment once again passed the House but was once more narrowly defeated in the Senate, and deleted by the conference committee.

Thus, the broad, vague regulatory definition of "wetlands" was left unchanged.

Although the Corps insists that its regulatory definition of "wetlands" is clear enough to give notice to the lay businessman of just what is a wetland, in August 1981, an interagency symposium of officials from several federal agencies with jurisdiction over "wetlands" was unable to agree on a common definition of the term.

It was against this statutory and regulatory background that my battle with the Corps started. I will now summarize the primary events of this conflict.

At the time I entered the industry in 1973, the domestic scallop industry was floundering. The entire United States fishing industry has been in a recession for years as high labor and energy costs have enabled foreign companies to take over most of the domestic fish market. In the scallop industry, the situation was even more critical, as better than 70% of the U.S. market was supplied by foreign scallop producers.

A key cost factor in the scallop industry was the slow procedure by which the scallops were individually shucked by hand. The labor overhead from this tedious operation made it virtually impossible for domestic scallop processors to compete price-wise with the foreign producers. Recognizing the cost advantage that would be gained if manual shucking of the scallops could be eliminated, I spent many long months and considerable capital designing a machine to efficiently separate the scallop meat from the shell. The result was the creation of the first steam machine to mechanically remove the meat. Using a combination of steam and vibration, the machine is capable of processing in one day as many scallops as 500 workers could do by hand. Further, the resultant scallop meat is cleaner and of higher quality.

The economic benefits of this cost-saving innovation were enormous. Over an eight-year period, annual sales of Florida scallops soared from less than $20,000 per annum to nearly $40 million. Southern Seafood developed into the largest and most productive processor of scallops in the nation. Brevard County, whose officials had urged me to locate my operations there, became the center of the United States scallop processing industry. While the U.S. had formerly imported up to 70% of its scallops, this figure shrunk to less than 40% by 1980 and, for the first time, domestic scallops were being shipped into foreign markets. This countered the U.S. trade deficit and reversed the negative and unfavorable balance of payments trend.

Of course, one of the inevitable consequences of the Company's continuous growth was an ever increasing number of shells for disposal. In 1977-78, after consulting with state environmental and regulatory officials, I purchased a 37 acre tract of land on

Merritt Island just a few miles from the plant, at a cost of $175,000. The property, which was zoned for agricultural use, is bordered by the Banana River on two sides, but separated from the river by a state highway built some 40 years earlier. On the other two borders, there are wooded highlands, permanent homes and undeveloped property. The tract is dry land located well above the river's high water mark, and capable of supporting heavy cranes and earth-moving equipment.

Before initiating this landfill for shell disposal, I took steps to ensure the site would be a sanitary and environmentally sound fill area. The contour and layout of the site was engineered to conform to all pertinent state and county regulations, and to enhance the esthetic appearance of the area.

Over the next three years, I operated the fill site without incident. All shells transported to the property were covered with soil within a few hours of arrival. No noxious odors emanated from the site, which was in full compliance with the applicable requirements of the Florida Department of Environmental Regulation. Local mosquito control officials credited the scallop landfilling activities with reducing the island's mosquito problem.

My determination to keep this landfill site clean was in accord with my company's efforts to comply with other government environmental regulations at the Southern Seafood processing plant, located at the docks in Cape Canaveral. Unlike other fishing companies operating at Cape Canaveral, I had obtained an EPA permit and installed "screening" equipment to ensure that direct discharge of scallop residue at the dockside plant was minimized. I strove to maintain the purity of the local waters not only in order to comply with the law, but also because I recognize that Southern Seafood's long-term prosperity is dependent upon clean water. A decline in water quality would inevitably have an adverse impact on the scallop beds.

Throughout the period 1977 to 1979, inspectors from the Florida DER regularly toured the landfill site and permitted operations to continue. However, in 1979 the Corps suddenly began conducting the inspections and imposing previously unmentioned environmental

restrictions.

In a series of letters, the Corps informed me that large sections of my property constituted "wetlands" and were therefore subject to the section 404 permit program. I asked the Corps to provide me with an explanation of why my property had been suddenly classified as a "wetland" area. The Corps' response was a stone-walled refusal to provide any information regarding the classification beyond the cursory statement that Sea Daisy, Leather Fern and Sea Pursiane were present on the property. The Corps insisted that I had to seek a permit.

While questioning the Corps' right and authority to exercise jurisdiction over my property, I also recognized that, as a practical matter, other potential deposit sites were too expensive or also lacked a permit. Thus, I took the initial step of applying for a Section 404 permit and I hired an engineering firm to prepare the required land study. Before I had completed the application, however, the Corps' officials informally told me that my application would be denied!

Through more formal channels, on March 2, 1981, the Corps issued a cease and desist order directing me to halt all deposits of shells on the land and to replant the disputed areas with certain varieties of wetland vegetation. Failure to do so, I was told, could result in civil penalties of $10,000 per day, and criminal penalities of $50,000 and a prison term. In effect, the Corps was telling me to shut down my business and furlough 300 workers.

Still, I made one further effort to reach a compromise with the regulators. I offered to set aside up to eight of the 37 acres as a wetland area, even if it was necessary to artificially create the wetlands. The Corps rejected the proposal. I then arranged a symposium, attended by Corps officials, of local business, government, and citizen representatives on the issue of seafood waste management in the Cape Canaveral region. The participants at the meeting reviewed the numerous ways in which the callico scallop industry and I had benefitted Brevard County without harming the environment, including:

- the creation of 400 new jobs, with the prospect of an additional 300 positions in 1982 - jobs which offset loss

of employment in the local shrimp industry, which is currently in a depression;

- federal, state and local tax revenues in excess of $3 million annually;
- a significant reduction in the local mosquito population;
- seafood enterprises are regarded as "light industries" and pose much less of an environmental threat than so-called "heavy industries";
- the presence and growth of the Cape Canaveral scallop industry has encouraged other economic development in the harbor area;
- the strengthening of the domestic shellfish industry has assisted the balance of trade;
- encouraging the growth of the local fish bait industry; while the local shellfish industry has been expanding, there has been no adverse impact on water quality, and that if the Lambert fill site had ever been a productive wetland, it had ceased functioning as such nearly 40 years earlier when the public highway had been built between the site and the Banana River.

The Corps was unmoved, stating:"We'll see you in court."

On May 15, 1981, the Corps' attorneys filed, in the U.S. District Court for the Middle District of Florida, a motion for a preliminary injunction to close down the fill site. U.S. v. Lambert, C.A.No. 81-255 (M.D.Fla.).

In its complaint for the injunction, the Corps alleged that my activities in depositing the shells were threatening irreparable harm to the fish in the nearby Banana River. According to the Corps' allegations, the removal of vegetation from the landfill area would result in a loss of detritus -- a potential nutrient for the fish. Detritus is a particulate organic material formed when bacteria, insects and other small organisms feed on the vegetation. Under the Corps' scenario, detrital material is supposedly carried out by receding tidal waters off the Lambert property and into the Banana River where it is used as food. The Corps maintained that unless all depositing of shells was immediately ceased, the flow of detrital material would be severely

reduced with resultant harm to the fish. As an alternative site, the government proposed that Southern Seafood dump its shells at the Port of Canaveral, where they would be utilized as fill material in the Port's expansion program.

This final proposal by the government truly highlighted the absurdity of the government's case. The Corps, which was alleging that depositing the shells on my dry land was harmful to "the waters of the United States," was now proposing that the shells be dumped directly into the waters of the Atlantic Ocean. Further, the Corps, while suing me for failing to obtain a Section 404 permit, casually overlooked the fact that the Port did not have a 404 permit.

Irrational as that particular proposal was, it was merely one of several shortcomings in the government's case. During the three-day hearing on the motion for a preliminary injunction, we produced evidence that:

- while I had been placing shells on the property for over four years at a rate of up to four million pounds a week, there had not been any detectable injury to the fish in the Banana River;
- since the construction of the adjoining highway some 40 years earlier, there had been no tidal or overland flow of water between the land and the river except during extreme climatic conditions;
- for any detrital matter to reach the river from the property, it would have to go through a narrow culvert on one far end of the property, pass under the highway, and then make its way through a salt marsh to the river. Consequently, there is no exchange of detrital matter between the river and the property; and
- while the Corps charged that Southern Seafood was discharging a pollutant by excavating the central portion of the land, the only material being discharged was the very same soil that was being excavated.

Consequently, on June 3, 1981, the District Court denied the preliminary injunction. The government quickly filed for reconsideration, but the Court stood firmly behind its decision.

The government next docketed an appeal with the U.S. Circuit Court of Appeals. However, in an attempt to short-circuit normal appellate procedures, the government lawyers, on October 14, 1981, filed an emergency motion for an injunction pending appeal. Just one day after the Assistant Secretary of the Army had announced plans to get the Section 404 program "off the backs" of the people, the bureaucratic minions were in court trying to shut down a small business. Further, in a callous and insensitive statement of the government attorneys' total disregard for the welfare of the workers, the government explicitly argued to the Circuit Court that "the employees' desire for job security" was secondary to the protection of even two (2) acres of wetlands.

For the third time, I was forced to litigate the same issue - whether the depositing of shells, which had been on-going for four years, posed such an imminent threat of harm to the environment as to justify the immediate issuance of injunction. For the third time, a judicial body ruled that there was no such danger, as the Circuit Court denied the emergency motion.

While I prevailed once again, the cost to the parties and the public had been high. Further, the end is not in sight. The government is continuing to pursue the matter in both the Circuit Court, with another pending appeal, and in the District Court, where a full trial on the merits of its complaint for a preliminary injunction is scheduled for late Fall 1982.

Nor are legal expenses the only costs which I and all small businessmen incur because of government regulatory battles. There have been numerous indirect consequences, the costs of which can never be calculated. These include the time lost from supervising operations and enhancing efficiency, as well as the mental strain and anguish of having an entire enterprise threatened with closure. Rather than applying my energies to running the business and developing new, more productive equipment, better than 50% of my time over the past two years has been spent responding to the government's attack. Instead of coping with the problems of business and competition, I must devote my time to resolving the maze of contradictory government actions and regulations. Better

than 17 federal, state and local regulatory authorities claim jurisdiction over my enterprise. It is highly demoralizing to operate in a regulatory jungle where cooperation with federal government directives can place companies in violation of contradictory regulations from state and local agencies.

One of the central themes of President Reagan's administration had been his pledge "to declare war on government overregulation," and to promote economic growth. As I have tried to show, the Corps' permit program is a classic example of a well-intentioned government policy that had evolved into a jungle of regulations that are strangling small businessmen without effectively aiding the environment.

In conclusion, I would like to stress that it is now very clear that the permit system has gone far beyond the boundaries Congress originally envisioned when it passed Section 404 of the Clean Water Act. The cumulative effect of more expansive regulations has been to create a patchwork of overlapping and contradictory rules which are stifling the economic efforts of small landowners. Under the pretense of protecting wetlands, the Corps has issued rules which arbitrarily classify even dry land separated from nearby water as "wetland." In so doing, it has violated one of the most fundamental rules of the law - that in implementing a statute, the agency should rely on the plain meaning of its words.

It is now time to take the necessary steps to revise the Section 404 program to conform with the Congressional intent and reinstate a sound, rational and proper balance between environmental and economic goals.

Accordingly, I urge this subcommittee to consider and approve legislation which will remove "wetlands" from the Corps' jurisdiction and return the Corps to its traditional role of regulating our truly navigable waters.

TEXAS ENERGY AND NATURAL RESOURCES ADVISORY COUNCIL
200 EAST 18TH STREET ☆ AUSTIN, TEXAS 78701 ☆ 512/475-0414

July 23, 1982

CO-CHAIRMEN:
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Lieutenant Governor William P. Hobby

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Commissioner Mack Wallace
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Mark White
Attorney General

Dr. Milton L. Holloway
Executive Director

The Honorable John H. Chafee
Chairman
Senate Subcommittee on Environmental Pollution
5229 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

The Senate Subcommittee on Environmental Pollution will soon be holding hearings on proposed amendments to the Clean Water Act. One of the issues to be addressed by the Subcommittee is the need to amend Section 404 of the Act. Because Texas is concerned that present implementation of Section 404 does not properly respect the rights of the states and may unnecessarily hinder important projects, we would like to take this opportunity to submit, as a part of the official hearing record, a statement of Texas' position regarding amendments to Section 404.

The enclosed resolution was adopted by the Texas Energy and Natural Resources Advisory Council, a state energy and natural resources policy council which we jointly chair. As you can see, this resolution endorses in concept the provisions of S. 777, currently pending before the Subcommittee. It also recognizes that certain wetlands currently regulated under Section 404 are of critical importance to the state's economy and environment, and commits the State of Texas to accept responsibility for the management and protection of such wetlands.

In our view, there is at issue in your consideration of Section 404 a very important principle of federal/state relations. While the national interest in traditionally navigable waters is sufficient to justify federal involvement in regulatory programs affecting these areas, we believe that the national interest in other waters of the United States is less obvious. Although we recognize that such a national interest may exist, we feel that the interests of the respective states in waters that are not used

for navigation and are wholly within the boundaries of a state are much greater. Consequently, it is our position that decisions concerning the use and regulation of such waters should properly be made by state governments. We urge you to recognize the states' interests in non-navigable waters and to amend Section 404 to restrict federal regulatory activities to those traditionally navigable waters in which the national interest is paramount.

The State of Texas has long been committed to the wise management of its natural resources. We hope that you will take this opportunity to give Texas the chance to manage its state waters in accordance with this policy. As always, we stand ready to assist you in any we can in your efforts to improve our country's management of its vital water resources.

Sincerely,

W. P. Clements, Jr.
Governor

W. P. Hobby
Lieutenant Governor

WPC/WPH/cg

Enclosure

cc: Senator Lloyd Bentsen
240 Russell Senate Office Building
Washington, D.C. 20510

Senator John G. Tower
142 Russell Senate Office Building
Washington, D.C. 20510

Resolution

of the

Texas Energy and Natural Resources Advisory Council

Regarding

the Discharge of Dredged and Fill Materials

Under

Section 404 of the Federal Clean Water Act

WHEREAS, Section 404 of the Federal Clean Water Act allows the U. S. Army Corps of Engineers, under Environmental Protection Agency supervision, to issue permits for the discharge of dredged and fill materials into the waters of the United States; and

WHEREAS, Section 404 of the Clean Water Act and Sections 9, 10, and 13 of the 1899 Rivers and Harbors Act have delayed the construction of needed energy and water development projects and have deprived citizens of the use and enjoyment of private property without due process of law; and

WHEREAS, the jurisdictional limits of Section 404 are excessive, extending beyond navigable waters into areas where justified federal interests are not apparent; and

WHEREAS, the Fish and Wildlife Coordination Act of 1934, as amended in 1958, has been used by certain federal agencies to demand excessive concessions from applicants for federal permits, including Section 404 permits; and,

WHEREAS, the coastal wetlands of Texas are of critical importance to the economy and environment of the State;

NOW, THEREFORE, BE IT RESOLVED that Section 404 of the Clean Water Act be amended to limit federal jurisdiction to waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water marks; and be it

RESOLVED, that Section 404 be amended to require that no permit may be denied or conditioned for any reason other than that the discharge of dredged or fill material would not comply with the applicable provisions of the Clean Water Act concerning water quality requirements and to provide that a permit may not be denied nor conditions required for any reason relating to the effects of diversions, storage, or consumption of water authorized pursuant to state water allocation decisions; and be it

RESOLVED, that Section 404 be amended to allow any state at the written request of the Governor concurred in by the Legislature of such state to extend application of the provisions of Section 404 to those waters other than navigable waters within such state that are listed and defined by the Governor of such state in his request; and be it

RESOLVED, that Section 404 be amended to provide that discharges subject to Section 9, 10, or 13 of the Rivers and Harbors Act of March 3, 1899 be regulated by Section 404, and not subject to the Rivers and Harbors Act, except as to effect on navigation and anchorage; and be it

RESOLVED, that the State of Texas, through the Texas Energy and Natural Resources Advisory Council and other appropriate agencies, recognize and accept responsibility for the management and protection of all coastal wetlands.

Adopted this 12th day of March, 1981.

William P. Clements, Jr.
Governor of Texas
Co-chairman

William P. Hobby
Lt. Governor of Texas
Co-chairman

97-999 O—82——86

STATEMENT OF

RALPH RAYBURN
EXECUTIVE DIRECTOR
TEXAS SHRIMP ASSOCIATION

ON

SECTION 404

OF THE

CLEAN WATER ACT

Before The

SENATE SUBCOMMITTEE ON

ENVIRONMENTAL POLLUTION

Of The

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Mr. Chairman and members of the subcommittee, I am Ralph Rayburn, Executive Director of the Texas Shrimp Association. Ours is a trade association for the Texas shrimping industry representing primarily the harvesting sector of the fishery. In 1981 the dock value of shrimp landed in Texas was $165 million. This makes Texas the most valuable contributor to the nation's most valuable fisheries.

The interest in your subcommittee's deliberations today hinges on our concern to maintain suitable marine habitats for successful completion of the shrimp's life cycle. In brief this life cycle consists of adults spawning in the open sea, juveniles migrating to estuarine areas, and then sub-adults returning to the open sea. It is during the estuarine phase that the organism is most susceptible to loss of habitat. We are quite concerned over the prospect of reducing habitat protection as a means to expedite the permitting process of the Federal Water Pollution Control Act.

The legislation being considered today would limit the scope of the 404 process to the disposal of dredged or fill materials in navigable wate s. The extent of this coverage would be further limited by the definition of navigable waters. The apparent intent is to reduce the requirements within the 404 permitting process to assist certain industrial development. This would however, create counterproductive impacts on the fishing industry.

There are estimated to be 412,516 acres of coastal wetlands in Texas. While the area to be excluded from 404 jurisdiction cannot be exactly determined, the range is 306,916 to 377,836 acres or 74.4 percent to 91.6 percent of these coastal wetlands. This, in view of the fact that over 90 percent of the commercial and 70 percent of the recreational fisheries catch are dependent on wetlands and estuaries, makes for a critical situation.

It has been reported that construction and maintenance of navigation channels represents the single largest form of estuarine alteration on the Gulf coast. As reflected in a 1977 article

in the publication Marine Fisheries Review, each year the Corps of Engineers dredges an average of 151.5 million cubic yards of sediment from Gulf coast channels and harbors. This dredge material is equivalent to a roadbed about 50 yards wide, 1 yard deep and 1743 miles long, or the driving distance from Key West, Florida to Brownsville, Texas. This enormous amount of material mandates precautions to insure disposal in the most responsible manner to alleviate impacts to sensitive areas. Without protection, the coastal wetlands would be highly vulnerable as disposal sites.

At present, the 404 authority includes all adjacent wetlands to navigable waters. These are "bordering, neighboring, or contiguous" wetlands. The term wetland is defined as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions". The value of these areas to the shrimp fisheries lies in the ability to produce those vegetal types which provide substantial nutrients and organic material to the estuarine areas. These elements contribute to both the primary and secondary productivity of the ecosystem. Shrimp are animals which generally feed on detrital material and small organisms associated with the bottom sediments. As wetlands are converted into upland areas through mismanagement, the source for a substantial portion of the shrimp's diet is choked off.

More pressure will be brought on these wetlands as the population continues to shift to coastal areas. Stripping the wetlands of protection under 404 in view of projected population growth patterns is totally unwarranted as well as counter to other federal legislation such as the Magnusen Fisheries Management and Conservation Act of 1976 which seeks to promote and develop the fisheries of this nation.

The proponents of changes in 404 emphasize the long, tedious process inherent in completing the obligations of the current

requirements. My personal experience in working with various projects is that those applicants who conscientiously seek input from the various interst groups with both favorable and unfavorable opinions on the proposed project, have much less difficulty in meeting their obligations. Those applicants, however, which feel they can manipulate or completely ignore sound concerns expressed on a project, soon find they are embroiled in a lengthy permitting process which may ultimately lead to litigation and further delays.

Our suggestion to expedite the permitting process under section 404 is to encourage earlier scoping meetings on significant projects with a sincere effort made by the applicant to satisfy the concerns expressed.

The Texas Shrimp Association as well as the industry it represents has a significant interest in maintenance of the critically important wetlands and estuarine habitats along the coast of the Gulf of Mexico. We realize that greater demands will be continuously placed on these important areas and we wish not to be considered obstructionists. We do feel it is critical to our livelihood and the vitality of the majority of fishery resources in the Gulf of Mexico, to protect the wetland areas.

Mr. Chairman, we request that provisions of section 404 as they relate to the coastal areas not be undermined.

Thank you for the opportunity to present this testimony.

The Texas State Soil and Water Conservation Board's
Position on Senate Bill 777

This paper is written to support and facilitate the passage of Senate Bill 777, which will redefine navigable waters under section 404 of the Federal Water Pollution Control Act to those waters which are used, or are susceptable to use in their natural condition or by reasonable improvement, as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark. Senate Bill 777 will, thereby,restrict the expansion of federal authority over non-navigable waters and return to the states the authority and responsibility in managing and using their land and water resources. The bill will also restrict the regulation of private property and land use control now exercised by the federal government through the Corps of Engineers.

The State of Texas has voiced strong opposition to the Section 404 dredge and fill regulatory program since its inception. In 1975, strong opposition was voiced by the Governor, Lieutenant Governor, Speaker of the House, the 64th Texas Legislature as well as virtually all affected state agencies. All of these people foresaw at the time what Section 404 has in fact become; federal land use regulation through the back door. The problem stems from the definition of navigable waters mandated by the courts and adopted by the Corps of Engineers. Thus we have the almost complete conversion to a "land use" bill from what was originally perceived in 1899 (when the 1899 Refuse Act was enacted) as a law to protect navigational channels.

The true insidious nature of this law does not become apparent until one considers the uses environmental groups, the EPA and the U.S. Fish and Wildlife Service make of this "tool". These groups were quick to see that Section 404 with the broad definition of navigable waters they fostered gives them complete veto power over public and <u>private</u> undertakings which fall within the ever increasing boundaries of the program.

We are sure that the intent of Congress was far different than what we are now experiencing. We do not believe that Congress intended to make the Corps of Engineers a major landlord in our nation. Private citizens have been made subservient to the Corps of Engineers, and through interagency agreements, the Fish and Wildlife Service and narrow minded special interest groups. As things stand now they have no recourse but to accept the decisions handed down. This law is a major example of a failure in our governmental system. Legislative history is replete with language describing the intention of the Congress to regulate through section 404 only the disposal of pollutants dredged from the bottom of navigable waters in specific sites. The system which is supposed to enact laws for the overall good has been circumvented by private interst groups with one track environmentalist minds with generous support from federal judges, environmental protection activists, and the ever sympathetic federal environmental agencies. If the precedent set by the court mandated definition of public waters is not reversed soon, the right of a private citizen to own and use private property will be seriously jeopordized.

The Texas State Soil and Water Conservation Board is in favor of Senate Bill 777 and remains unalterably opposed to the current Section 404 permit program and the definition of navigable waters associated with it. Some of our major objections to the current program are as follows:

1. Section 404, as currently enforced, places the historic recognition of the authority and responsibility of the states in developing and using land and water resources in serious jeopardy. We do not support this continuing trend of supercession of state powers and seemingly endless expansion of federal power.

2. Section 404 as it is administered and used by the Corps of Engineers, the EPA, environmental groups, and the U.S.D.I. is the most widespread serious threat to private property rights to date. Section 404 is plainly land use regulation in the name of water quality. Enclosed is an actual example (attachment #1) of the Department of Army ordering a private citizen to restore his land to Fish and Wildlife Service specifications.

3. Various environmental groups and agencies use the 404 permitting process as a means of forcing their narrow minded philosophy into public and private endeavors. They have become so entrenched that their objection most often amounts to veto power over a project or undertaking. The Corpus Christi Ship Channel 45-foot Project is an example of the power environmental groups have through this instrument. Simply because the Fish and Wildlife Service objected to plans for disposal of dredge material in Corpus Christi Bay, the Corps of Engineers developed plans to dispose of the material on 2000 acres of prime agricultural land. Various federal agencies have also used the jurisdiction over private lands adjacent to "navigable waters" as a means of entry to these lands for other purposes.

4. Persons engaged in farming, ranching and timbering have complained bitterly that all of their minor activities on all of their minor streams have to go through a cumbersome bureaucratic process to achieve a permit from the Corps of Engineers. Normally law abiding citizens often find themselves in violation of the law because they have no idea that a permit would be required to carry out certain activities near small streams.

5. Section 404 mindlessly regulates nonproblems. It is basically a non-productive "paper chase", contrary to the intent of congress and it costs the state and private citizens considerable sums to bring about highly questionable benefits.

6. Virtually all of the conservation activities our agency is involved in could be adversely affected by the current Section 404 program or its spin-offs. The conservation of our soil and water resources should be given equal consideration with our fish and wildlife resources.

7. Under the current judicial interpretation of "navigable waters" there is no mechanism to control the continuing expansion of federal jurisdiction over land and water resources. Enclosed is a letter (attachment #2) which describes the rulings from the Lake Ophelia Case. The federal court ruled that any plant tolerant to wetland conditions is a wetland plant. The U.S. Fish and Wildlife Service recently adopted a new wetland classification system (FWS/OBS-79/31, Classification of

Wetlands and Deepwater Habitats of the United States) which opens the door for bringing more and more land under wetland classification. This has to be stopped. The only way to do it is to clarify the definition of navigable waters in Section 404 of Public Law 92-500.

It is our hope that the United States Congress will give favorable consideration to Senate Bill 777 and pass it as it was introduced by Senators Tower and Bentsen. No doubt the issue will cause a confrontation with environmental interest groups. We hope that congress will keep the overall good of the country in mind when they are considering this legislation and not bow down to the strong lobby of the environmental special interest groups.

A. C. Spencer
Executive Director
Texas State Soil and Water
Conservation Board

* *

Prepared by Texas State Soil and Water Conservation Board, July 5, 1982, as testimony to be presented to the Senate Committee on Environment and Public Works, July 29, 1982.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102

REPLY TO
ATTENTION OF:

SWFOD-O

2 JUN 1981

RECEIVED

JUN 10 1981

TEXAS STATE SOIL and
WATER CONSERVATION BOARD
TEMPLE, TEXAS

Mr. Eddie Blackmon, Jr.
Blackmon Service Center
850 NW Front Street
DeKalb, Texas 75559

Dear Mr. Blackmon:

This is in reference to the consent agreement between you and the Corps of Engineers and its provisions for restoring portions of your farm near Talco, Texas.

After consultation with other concerned agencies and evaluation of expected impacts of the unauthorized work, we have developed minimum criteria for a restoration plan which should adequately protect the valid public interests. These guidelines should be incorporated into your plan and submitted for our approval. The criteria have two major objectives, maintenance of existing drainage patterns, and reestablishment of vegetation along the riparian corridors. The eastern and western portions of Oliver Lake Slough should be cleared of debris and soils and restored in such a manner that the slough will carry overflow waters from the river and provide drainage for adjacent lands. Restoration is restricted to the original channel configuration and any work should result in stabilized bank slopes.

Protection of water quality and other public interest factors requires that natural forest regeneration within the riparian zones be supplemented and hastened by artificial means. Inclosure 1 includes a list of plant materials adapted to your area and specifications for planting which should provide the desired benefits. The list is not exclusive and we will consider use of other suitable species. It is expected that natural reproduction of green ash will be prolific; therefore, this species should not be planted. Inclosure 2 includes sources for various plant materials. Your plan should utilize a number of different species in various planting schemes to encourage forest diversity. Diversity promotes forest vitality by establishing species with different growth and maturity rates, shade and flood tolerance, morphology, and resistance to disease, insect, and environmental stresses. Diversity is also important to wildlife in providing various life requisites.

The standards presented in Inclosure 1 should provide adequate protection for the overall environment in the long term; however, short term impacts to specific

environmental considerations may be better reduced with different restoration strategies. The U.S. Fish and Wildlife Service (USFWS) recommends establishment of 50 trees per acre ranging from one to three inches in diameter. This could be achieved by spacing trees 30 feet apart in staggered rows. Seventy percent of the species chosen should be those which will eventually dominate the forest stand and 30 percent from those which will be subdominant (as indicated by an * on Inclosure 1). Eighty five percent of the trees must survive after three growing seasons. Shrubs should be interspersed on 15 percent of the area. Native seed producing grasses and herbaceous material should be used for erosion control in the planting area. You are advised that both the USFWS and the Texas Parks and Wildlife Department have indicated a willingness to provide detailed planning aid in design and layout of an appropriate restoration plan.

I appreciate your cooperation in this matter. Please contact us if we can provide further information or assistance.

Sincerely,

Charles W. Lively

CHARLES W. LIVELY
LTC, CE
Acting Commander and District Engineer

INCLOSURE 1

GUIDANCE FOR PLANNING MINIMUM

ACCEPTABLE RESTORATION

Stems per acre to be planted: 77 trees, 33 shrubs

** Acreage to be planted: approximately 625 acres as shown on attached photograph

Required survivial: 80 percent survival at the beginning of the 3rd growing season

Planting Stock: 6-36 inch in height or larger

Ground Cover: Herbaceous species must be incorporated into the planting scheme parallel to the river to prevent erosion and act as a sediment filter.

Planting Regime: Configuration and design are at the planners discretion but should provide the following benefits: erosion protection, flood water filtration, reduction of overflow velocity, wildlife habitat, rapid establishment of vegetative cover, dispersion and diversity of various species and growth forms sufficient to achieve other objectives. Proper site preparation is critical to seedling survival as is protection from competition through cultivation or chemical control during the first two growing seasons.

TREES		SMALL TREES AND SHRUBS		GROUND COVERS	
Black Cherry	2A	Hawthorn	1B	Bermuda grass	1C
Cottonwood	1B	Buttonbush	1B	Canada wild rye gr	
Baldcypress	3C	Coral berry	2C	Fescue	1A
Hackberry	1A	Autumn olive	2A	Japanese Millet	1/
Cherrybark Oak	2B	Rim-red honeysuckle	3B	Common Reed Grass	
Nuttall Oak	1B	Viburnum spp	2A	Giant Reed Grass	1
Overcup Oak	1A	Carolina buckthorn	2C	Nut grass	1B
Water Oak	2B	Bayberry	2B	Prairie cordgrass	
Willow Oak	1B	Elderberry	2A	Johnson grass	1A
Swamp Chestnut Oak	2A	Deciduous holly	1A	Switch grass	2A
Pecan	2A	Wild plum	2A	Bushy bluestem	1B
Persimmon	1A	Fragrant sumac	2A	Vine mesquite	1B
Mulberry	3A	Swamp privet	1B	Smartweed	1A
American Elm	3A	Shrub lespedeza	2A	Green sprangletop	
Cedar Elm	1A	Amur privet	2B		
Bois d'arc	1A	Multiflora rose	2A		
Shumard Oak	2B	Japanese honeysuckle	1A		
Red Maple	2A	Sesbania	1B		
Boxelder	1A				
Swamp White Oak	2A				
Silver Maple	2A				
Sycamore	3C				
Bur Oak	3A				
Water Hickory	1A				
Other Hickories	2-3A				
Black Willow	1C				
Western Soapberry	2B				
Gum Bumelia	2A				

[illegible] planting zones along the Sulphur River [illegible] Oliver Lake are those distances specified [illegible] the agreement.

INDEX TO SPECIES CLASSIFICATION

1 Naturally occurring and well adapted t the site
2 Moderately well adapted to the site
3 Adequate growth expected
A Excellent food for wildlife
B Good food or other value to wildlife
C Little value to wildlife

CONCERN OVER EXPANSION OF WETLAND IDENTIFICATION

WHEREAS, the U.S. Department of the Interior Fish and Wildlife Service has substituted FWS/OBS-79/31 December, 1979, for Circular 39, 1956 for the purpose of defining and identifying wetlands of the United States; and

WHEREAS, without benefit of additional legislation or the issuance of regulations these new definitions greatly expand lands classified as wetlands; and

WHEREAS, changes in definitions were not reviewed with those vitally affected, the owners of farm and ranch lands, even though expansion of acreage of wetlands pose serious legal restrictions on the use of privately owned land; and

WHEREAS, possible loss of use of land for agricultural purposes and possible infringements on use of water for irrigation purposes may result in financial loss to landowners; and

WHEREAS, intrusion upon privately owned land by employees or agents of the U. S. Department of Agriculture and/or the U. S. Department of the Interior for the purposes of monitoring or identifying, vegetation or soils and soil characteristics for the purpose of possible future restrictions on the owners use of his land without full explanation of implications, and possible consequences is an invasion of private property rights;

NOW, THEREFORE, BE IT RESOLVED, that the President of the United States, the Secretary of U. S. Department of the Interior, the Secretary of the U. S. Department of Agriculture and the Congress of the United States collectively or singly make such intercession as may be appropriate to alter and prevent reclassification of wetlands of the United States according to the unauthorized bureaucratically drawn redefinition of wetlands according to the above named FWS/OBS-79/31; and

BE IT FURTHER RESOLVED, that the President of the United States be requested to issue an executive order to require all federal agencies to adopt and implement policies the same as those used by USDA-Soil Conservation Service in defining wetland areas by recognizing wetlands as presently described in Circular 39 of the U.S. Department of the Interior, Fish and Wildlife Service (1956).

United States Department of Agriculture
Soil Conservation Service
P.O. Box 2890
Washington, D.C.
20013

Eng

Subject: Recent 404/Wetland Ruling in Louisiana [redacted] Date: May 7, 1981

To: TSC and State Water Quality Coordinators

Enclosed is a March 12, 1981 ruling from Louisiana, which may be of interest to you concerning Section 404 dredge or fill permits. Judge Nauman S. Scott, Chief of the U.S. District Court for the Western District of Louisiana, passed down this second decision in a case concerning the conversion of bottomland hardwood wetlands for soybean production. The case is known by several names: Prevot, Lake Ophelia, or the Lake Long case.

In 1978 the Environmental Defense Fund and the National Wildlife Federation sued the U.S. Corps of Engineers and the Environmental Protection Agency that the clearing and draining of bottomland hardwoods were violations of the Clean Water Act's Section 404 and Section 10 of the Rivers and Harbors Act. Judge Scott split the case into two phases. The judge ruled in his first decision that collecting, gathering, and transporting cut-down trees and other vegetation across a bottomland hardwood area constituted a discharge of dredged material into U.S. waters.

In the recent second ruling, the judge found that on the 20,000 acre Lake Long tract all "wetland" vegetation had a common characteristic; they were all tolerant of wetlands to a greater or lesser degree. He said that all species tolerant of wetlands were wetland species. Intolerant vegetation, which can not grow in wetlands under any conditions, are considered to be non-wetland species.

The judge concluded that all soils of the Lake Long tract were wetland soils, except for those soils of Roxanna, very fine sandy loam, gently undulating, and Norwood silty clay loam, occasionally flooded. These soils are found along the Red River and the Lake Long ridge (see map). He granted a permanent injunction against any additional clearing in the wetlands of the Lake Long tract, except with a Section 404 permit. To date no appeals of the decision have been filed.

Charles Terrell

CHARLES R. TERRELL
Environmental Specialist
Ecological Sciences Staff

Enclosure

Trinity River Authority of Texas

General Office

0903.104.001.404

July 21, 1982

The Honorable Senator John Chafee, U.S.S., Chairman
Subcommittee on Environmental Pollution
Environment and Public Works Committee
4204 Dirksen Senate Office Building
Washington, D. C. 20510

Re: Section 404 of the Clean Water Act

Dear Mr. Chairman:

I understand that the Subcommittee on Environmental Pollution is to hear testimony regarding the Clean Water Act on July 29. Please enter these comments on behalf of the Trinity River Authority of Texas into the hearing record for the Subcommittee's consideration.

The Trinity River Authority has worked continuously for the past decade with federal and state agencies, local and regional water agencies, private citizens, and our Congressional delegation regarding Section 404. We have assisted the Corps of Engineers in implementing the program on our 90,000 acre Lake Livingston. We have had permits on a number of projects. We monitor all 404 permit actions in the Trinity River basin. We have reviewed the recent Administration proposals regarding implementation of the program within present law. We are familiar with S. 777 which would significantly amend the program.

We strongly support S. 777, especially in limiting the 404 program to actually/traditionally navigable waters. The present application of the program to all waters in the country consumes much time and money for only the rarest and smallest environmental consequence. I am firmly convinced that it does more environmental harm than good by wasting resources which could be applied to major environmental impacts. We even now have a situation in which a federal district court judge reviews all 404 permits in a nearly 200 river mile segment

P.O. Box 60
Arlington, Texas 76010
(817) Metro 467-4343

of the Trinity River in "connection" with an 11 year old NEPA lawsuit on which there has been no action for years!

We urge the Senate to act favorably on S. 777, in order to improve the protection of the environment.

Sincerely,

DANNY F. VANCE
General Manager

DFV:jt

cc: The Honorable John Tower, U.S.S.
The Honorable Lloyd Bentsen, U.S.S.

TRINITY IMPROVEMENT ASSOCIATION

2117 W. Airport Freeway, Suite 31, Plaza Garden
P.O. Box 5509, Irving, TX 75062-0509
Metro 214-256-2333

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Upper Trinity:
B. Lynn Sanders

Mid Trinity:
Julian Wakefield

Lake Livingston:
Nat J. Davis, Jr.

At Large:
Dale Miller

July 6, 1982

Mr. Leroy Goodson
Texas Water Conservation Association
202 San Jacinto Building
Austin, TX 78711

Dear Mr. Goodson:

The TRINITY IMPROVEMENT ASSOCIATION commends congressional efforts to amend the Clean Water Act to limit the Army Corps of Engineeers control of streams to truly navigable waters. We support S. 777, as well as companion bills H.R. 3083 and H.R. 3962.

We also advocate reform of federal regulations and have reviewed with interest a recent instruction by the Office of Management and Budget to departments involved in the Section 404 permit process. I thought you might be interested in copies of letters sent by TIA President Perry to Assistant Secretary of the Army Gianelli and Mr. Demuth of OM&B.

Sincerely,

I. M. Rice
Executive Vice President

Enclosures

97-999 O—82——87

TRINITY IMPROVEMENT ASSOCIATION

2117 W. Airport Freeway, Suite 23, Plaza Building
P.O. Box 5509, Irving, TX 75062-0509
Metro 214-256-2333

June 21, 1982

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Lake Livingston:
Nat J. Davis, Jr.

At-Large:
Dale Miller

Mr. Christopher Demuth
Presidential Task Force on Regulatory Relief
Office of Management and Budget
Washington, DC 20503

Dear Mr. Demuth:

The need to reform the federal requirements imposed under Section 404 of the Clean Water Act has long been apparent. We have been dismayed to observe the success of tactics of project opponents in using procedural provisions of implementing regulations to delay badly needed water projects. Sponsors of water projects have acceded to demands of questionable merit simply to avoid continuing costly delays. The determination of the present administration to bring about regulatory reforms is viewed as a welcome relief.

We have reviewed the regulatory reform package released by the Office of Management and Budget last month regarding the Section 404 program. A problem with present procedures has been the unreasonable length of time elapsing between application and permit granting. In the case of two non-federal reservoir projects in our area, 930 days and 921 days respectively elapsed before the permits were finally issued. Imposition of time limits on review procedures and elimination of some layers of review will improve procedures significantly.

Delegating more authority to the states will work well in Texas. The provision for restraint by federal agencies in overriding decisions made by state and local governments unless water quality, navigation or other issues of national importance are involved appears reasonable. However, to retain federal control of construction in streams which are not navigable by any stretch of the imagination constitutes unreasonable interference with local governments and private individuals. To require a city to obtain a federal permit to lay a sanitary sewer in an intermittent stream bed within the city limits is unwarranted. It may be that amendment of the Clean Water Act is the only solution to this problem.

The instruction to clarify the scope of fedral regulations concerning 'wetlands' is also a much needed reform. Trying to determine whether or not permit is required under Section 404 is confusing to say the least, and subject to different interpretations by different government officials. A common set of rules is needed.

We will await with interest the response by the departments to the OM&B instruction.

Sincerely,

Russell H. Perry
President

Upper Guadalupe River Authority

215 W. Water St.

P. O. Box 1278
Kerrville, Texas 78028
512-896-5445

14 July 1982

B.W. Bruns
General Manager

The Honorable John Tower
515 Rusk, Room 8632
Houston, Texas 77022

Attention: Ken Carroll

Dear Senator Tower:

The Upper Guadalupe River Authority has serious concern of the current interpretation and application of Section 404 of the Federal Water Pollution Control Act Amendments of 1972.

The Authority constructed a modest surface water treatment project in which planning started in 1975 and construction was completed in March of 1981. The project included a 21-foot earthen filled dam, 840 acre feet impoundment, and a 4 million gallon per day treatment plant. The construction costs escalated from an initial estimate of $4,750,000 (1976) to $6,852,000 when the contracts were let in June of 1979. We feel this escalation of construction costs was mainly attributed to delays resulting from the lost time waiting for permits to be approved, particularly the Section 404 permit.

The Authority filed the Section 404 application on 13 December 1976 and it was approved 10 months later on 17 October 1977. We estimate that at least 60% of the construction cost increases occurred during the time the 404 permit was under review. The increased project costs required a second communitywide bond election and the sale of two additional bond issues.

Further, as a part of the 404 application review, the U. S. Fish and Wildlife Service, we feel, used the threat of further delay as leverage to include minimum instream flow requirements as a special condition of the permit. These special flow requirements were not supported by the Texas state agencies nor were they considered justified by the Authority or its engineers.

Since the UGRA's jurisdiction is more than 400 miles upstream from the traditional extent of navigation in the Guadalupe River, we feel the current requirement of the current interpretations of Section 404 are not justified and not in the best interests of Kerr County, the State of Texas, or the Nation.

The UGRA supports legislation (S.777) which would amend the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters, and for other purposes.

If we can provide additional information, please feel free to contact our offices.

Sincerely,

B. W. Bruns, P. E.
General Manager

955 L'Enfant Plaza, North, S.W. Suite 1101
Washington, D.C. 20024 — 202/488-0688

TESTIMONY
of
B. Joseph Tofani, President
Water Resources Congress
before the
Subcommittee on Environmental Pollution
of the
Committee on Environment and Public Works
U. S. Senate

July 29, 1982

Mr. Chairman and Members of the Subcommittee:

The Water Resources Congress, a nationwide organization dedicated to the wise use and proper management of our water resources, supports legislation which will limit Federal jurisdiction under Section 404 to regulation of discharge of dredged or fill material into "navigable waters" as defined prior to the Clean Water Act. We also support legislation to specifically exempt dams as point sources of pollution under the National Pollutant Discharge Elimination System (NPDES) permit program of Sections 301 (a) and 402 (a) of the Clean Water Act.

As you well know, the Federal Government for over 150 years has taken the leadership in the development and regulation of our water resources. However, in recent years the Federal interest has lessened in the development of our water projects and the Federal Government is shifting the responsibilities to non-Federal interests but not in regulations effecting water resources. We believe that the development and regulation should go hand in hand.

Non-Federal interests should have more responsibilities and decision making in regulations if they are going to be responsible for development.

With regard to Section 404 of the Clean Water Act, The Presidential Task Force on Regulatory Relief Recommendations are but initial steps in implementing a workable program to balance development with the protection of the environment.

The Presidential Task Force Recommendations, as this Committee is aware, eliminates the multi-level review, bureaucratic review procedures, and expands the use of general permits. However, it does not address, at this time, Federal jurisdiction under Section 404. We do not believe that it was the intent of Congress to broaden the definition of "navigable waters" to include every wet spot in this nation, regardless of size, duration or location. Congress surely did not intend to require unnecessary expenditure of funds, have unnecessary delays in the repair or construction of much needed minor structures in every area of the country.

Section 404, as may be modified by The President's Regulatory Task Force, will still cause unwarranted burden of Federal bureaucratic intervention into affairs of states, cities, local and regional agencies and the private individual.

We therefore urge legislation to limit Federal jurisdiction under Section 404 to regulate the discharge of dredged or fill material into waters which are "navigable waters" as defined prior to the Clean Water Act. This would give to the Non-Federal responsible officials jurisdiction over areas which are rightly their responsibilities.

With regard to the case of the National Wildlife Federation, et al, vs. Anne Gorsuch, Administrator, United States Environmental Protection Agency, et al, that dams be regulated as a point source of pollution under Sections 301 (a) and 402 (a) of the Clean Water Act.

For ten years under the 1972 Federal Water Pollution Control Amendments and the 1977 Clean Water Act, EPA determined national pollution permits are not required of dams. We agree and we do not believe that Congress intended the NPDES to apply to dams.

There are over two million dams of all sizes and for many purposes in the United States which would require permits under Judge Green's decision. This tremendous expansion of EPA's permit program would result in great delays, be extremely costly, and would not result in very many benefits.

The cost of minor modifications to a small number of dams would be staggering and in some cases impossible. Delays in issuance of permits would greatly effect agriculture, industry, domestic and municipal uses of water, recreation, navigation and other uses.

General permits would no doubt lead to many court actions with additional delays and costs.

We urge this Committee to consider legislation to exempt dams as point sources of pollution under NPDES permit program of Sections 301 (a) and 402 (a) of the Clean Water Act for the overall benefits to the nation and its citizens.

Thank you.

Wildlife Management Institute

709 Wire Building, 1000 Vermont Ave., N.W., Washington, D.C. 20005 • 202 / 347-1774

DANIEL A. POOLE
President
L. R. JAHN
Vice-President
L. L. WILLIAMSON
Secretary
JACK S. PARKER
Board Chairman

July 28, 1982

The Honorable John H. Chafee, Chairman
Subcommittee on Environmental Pollution
5229 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Chafee:

We appreciate the invitation to provide this statement on S. 777. Our understanding is that this bill will be considered this week at hearings being conducted on the Clean Water Act. Because the witness list is limited due to time constraints, this statement in opposition of S. 777 is being submitted for the record.

Personal detailed insight to the dredge and fill permit program has been gained in the past few years as a member of the Corps' Environmental Advisory Board.

The Institute's primary, grave concern is that S. 777 seeks to restrict federal jurisdiction of the 404 program arbitrarily to "navigable waters." This constriction would reduce geographic coverage by about 85 percent and open an estimated 80-90 percent of the nation's wetlands and waterways to potential degradation and loss. Such a situation would be completely inconsistent with objectives of the Clean Water Act and the desires of citizens, in our view. Regrettably, not all states have dredge and fill permit programs.

A careful review of dredge and fill authorities and proposals to change Section 404 of the Clean Water Act was completed a few months ago for the Natural Resources Council of America. A copy of the report is attached, since the findings have particular relevance to the changes proposed in S. 777. Your attention is directed to pages 8 and 9, which outline in some detail the negative impacts of proposed legislative modifications to Section 404, such as called for in S. 777.

Section 404 is the only nationwide system that exists to help maintain the physical, chemical and biological integrity of the nation's important aquatic areas, including its wetlands and estuarine waters. Results from several polls of citizens show strong support for maintaining aquatic areas, such as through Section 404. State, territorial and federal management agencies believe the existing dredge and fill permit system, with administrative improvements as needed, is absolutely necessary to help meet their public trust

responsibilities to perpetuate the populations and habitats of wild living resources. The attached resolution passed unanimously by the Caribbean Fishery Management Council is one example of the strong, widespread support for maintaining Section 404.

The congressional record on the purposes of Section 404 is clear. Administrative procedures to satisfy those objectives have been developed by the Environmental Protection Agency (404-b-1 guidelines) and the U.S. Army Corps of Engineers (Regulations for Permit Program). Even though 10 years have passed since Congress enacted the Federal Water Pollution Control Act Amendments, periodic changes in administrative procedures have prevented the program from becoming as well understood by citizens and as effective as it could or should be. As you know, additional changes in administering the dredge and fill permit program were announced 15 July 1982.

Despite this flow of program changes, the agencies have done a good job in handling permits and carrying out their resource stewardship responsibilities. With more program consistency and a set of reasonable permit regulations-guidelines in place, we believe the program could be improved by agency personnel developing more effective procedures and materials to inform citizens of needs for the program and on procedures for handling permit applications in a timely manner.

Even with the ever-changing procedural modifications, the Corps draft report on Impact Analysis of the Corps Regulatory Program (November 1981), shows that, with but a few exceptions, time for processing permit applications has been reasonable. In fact, the number of days required to handle permits has been declining, as experience has accumulated with the relatively new procedures. The draft report also showed that the Corps regulatory program results in a net positive benefit to the nation, with most benefits associated with "...avoiding costly water quality contamination, navigation obstruction and safety risks, and excessive wetland loss." The rate of wetland loss nationally is reported to be reduced by 50 percent through loss avoidance credited to the dredge and fill permit program.

In conclusion, we believe S. 777, if enacted, would detract substantially from meeting the objectives of the Clean Water Act. The dredge and fill permit system, as presently called for in the Act, is required to restore and maintain the physical, chemical and biological integrity of the waters of the United States. Therefore, we conclude that enactment of S. 777 would be inimical to the national interest.

Sincerely,

Laurence R. Jahn
Vice-President

Attachments

LRJ:dt

CARIBBEAN FISHERY MANAGEMENT COUNCIL
Suite 1108 Banco de Ponce Building • Hato Rey, Puerto Rico 00918

Telephones: FTS (809) 753-4926, 753-4927, 753-4928, Comm. (809) 753-6910

July 9, 1982

Mr. Laurence R. Jahn
Vice Chairman
Natural Resources
Council of America
1412 - 16th Street, N.W.
Washington, DC 20005

Dear Mr. Jahn:

For your information and for the action you might deem pertinent, we are attaching a copy of the Resolution that was unanimously adopted by the Caribbean Fishery Management Council during its June 23-24, 1982 meeting in relation to Section 404 of the Clean Water Act.

The Resolution expresses Council concerns for any changes to Section 404 that might led to reduce protection for wetlands and associated estuarine waters. As you know, Section 404 directs the Army Corps of Engineers to control the discharge of dredged or fill material into the nation's waters and wetlands. Under its provisions, the Corps, following guidelines set by the Environmental Protection Agency, controls the activities most destructive to the bulk of the nation's wetland-dependent fisheries.

Sincerely,

Omar Muñoz Roure
Executive Director

Enclosure

OMR/iv

19

CARIBBEAN FISHERY MANAGEMENT COUNCIL
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Telephones: FTS (809) 753-4926, 753-4927, 753-4928, Comm. (809) 753-6910

RESOLUTION

WHEREAS, the quality of the navigable waters of the United States including the waters of Puerto Rico and the U.S. Virgin Islands has been enhanced by the provisions of Section 404 of the Clean Water Act; and

WHEREAS, the provisions of Section 404 of the Clean Water Act have been thoughtfully developed over a period of more than 80 years; and

WHEREAS, the maintenance of high quality water in natural systems is essential for high quality fisheries production; and

WHEREAS, the Caribbean Fishery Management Council is aware of certain proposals to change the provisions of Section 404 of the Clean Water Act; and

WHEREAS, the proposed changes may ultimately result in deterioration of much needed and valuable fish habitat;

NOW THEREFORE, BE IT RESOLVED, that the Caribbean Fishery Management Council express its approval of changes that have positive effects on fish habitats and urges that no changes be made to Section 404 of the Clean Waters Act that will have adverse effects on the fish habitat of the United States including Puerto Rico and the U.S. Virgin Islands.

II

97TH CONGRESS
1ST SESSION

S. 777

To amend the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 24 (legislative day, FEBRUARY 16), 1981

Mr. TOWER (for himself and Mr. BENTSEN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Federal Water Pollution Control Act to restrict the jurisdiction of the United States over the discharge of dredged or fill material to those discharges which are into navigable waters, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

FINDINGS

SECTION 1. The Congress finds that the procedures mandated by, and regulations issued pursuant to, the Federal Water Pollution Control Act and the Act of March 3, 1899, have delayed the construction of needed energy water re-

source and other development projects without commensurate benefit to the Nation.

PERMITS FOR DREDGED OR FILL MATERIAL

SEC. 2. (a) Subsection (a) of section 404 of the Federal Water Pollution Control Act is amended to read as follows:

"(a)(1) The Secretary shall issue a permit to an applicant, after notice and opportunity for a public hearing, for the discharge of dredged or fill material into the navigable waters at a disposal site or sites specified by the applicant, unless the Secretary determines that such disposal site or sites cannot be specified through the application of the guidelines or other considerations in accordance with subsection (b). Not later than the fifteenth day after the date an applicant submits all the information required to complete an application for a permit under this subsection, the Secretary shall publish the notice required by this subsection.

"(2) For purposes of this section, the term 'navigable waters' means all waters which are used, or are susceptible to use in their natural condition or by reasonable improvement, as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark.

"(3) Notwithstanding any other provision of law, except as provided in subsection (g), the discharge of dredged or fill

material in waters other than navigable waters is not prohibited by or otherwise subject to regulation under this Act, or section 9, 10, or 13 of the Act of March 3, 1899 (33 U.S.C. 401, 403, or 407), or any other Act of Congress.".

(b) Subsection (b) of section 404 of such Act is amended by striking out "by the Secretary".

STATE REQUEST FOR FEDERAL JURISDICTION OVER NONNAVIGABLE WATERS

SEC. 3. Subsection (g) of section 404 of the Federal Water Pollution Control Act is amended to read as follows:

"(g) At the written request of the Governor of any State, concurred in by the legislature of such State in accordance with State law, the Secretary shall extend application of the provisions of this Act to those waters, other than navigable waters, within such State which are listed and defined by the Governor of such State in his request.".

REPEAL OF OPTIONAL STATE PERMIT PROGRAM

SEC. 4. Section 404 of the Federal Water Pollution Control Act is amended by striking out subsections (h), (i), (j), (k), and (l) thereof, and by redesignating subsections (m) through (t) (and all references thereto) as subsections (h) through (o), respectively.

NINETY-DAY REQUIREMENT FOR PERMIT DECISION

SEC. 5. The second sentence of section 404(l) of the Federal Water Pollution Control Act (as redesignated by sec-

tion 4(b) of this Act) is amended by striking out ", to the maximum extent practicable,".

MISCELLANEOUS AND CONFORMING AMENDMENTS

SEC. 6. (a) Section 404(o) of the Federal Water Pollution Control Act (as redesignated by section 4(b) of this Act) is amended to read as follows:

"(o) Nothing in this section shall preclude or deny the right of any State or interstate agency (or any entity designated by such State or interstate agency) to control the discharge of dredged or fill material in any portion of the waters, including the navigable waters, within the jurisdiction of such State, including any activity of any Federal agency, and each such agency shall comply with such State or interstate requirements both substantive and procedural to control the discharge of dredged or fill material to the same extent that any person is subject to such requirements. This section shall not be construed as affecting or impairing the authority of the Secretary to maintain navigation.".

(b) Section 205(g)(2) of such Act is amended by striking out "or 404".

(c)(1) Section 208(b)(4)(B)(ii) of such Act is amended by striking out ", which shall complement and be coordinated with a State program under section 404 conducted pursuant to this Act".

(2) Section 208(b)(4) of such Act is amended by striking out subparagraph (C) thereof and by redesignating subparagraph (D) as subparagraph (C).

(d) Section 308(a) of such Act is amended by striking out "404 (relating to State permit programs),".

(e)(1) Section 309(a)(1) of such Act is amended by striking out "or 404".

(2) Section 309(a)(3) of such Act is amended by striking out "or in a permit issued under section 404 of this Act by a State".

(3) Section 309(c)(1) of such Act is amended by striking out "or in a permit issued under section 404 of this Act by a State".

(4) Section 309(d) of such Act is amended by striking out "or in a permit issued under section 404 of this Act by a State,".

(f) Section 404(m) of such Act (as redesignated by section 4(b) of this Act) is amended by striking out "or a State program approved under this section,".

C